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62.35

57TH. ANNUAL CATALOG

# KENDALL AND WHITNEY

1927



## SEEDS

AGRICULTURAL IMPLEMENTS  
DAIRY AND POULTRY SUPPLIES

FEDERAL & TEMPLE  
STREETS



PORTLAND  
MAINE

D. N. Shoemaker

# For Customers to Consider

## ORDERING EARLY

It is suggested that customers consider the advantages of ordering early and as soon as possible after receipt of this, THE 1927 K. & W. CATALOG. Experience of past years brings this suggestion to the fore and when in the rush of the season it is impossible to fill the entire order (because of heavy call on certain articles) such items as are missing will not hold up shipment, but will go forward by separate parcel within a few days.

## STOCK SEED

**STOCK SEED.**—A large part of our seeds are grown for us on contract by special growers, from our own stock, and in locations best suited for their development. Others are secured from strictly reliable sources, and constant effort is made to secure only the best.

## ADDRESS AND INSTRUCTIONS

**ADDRESS, ETC.**—Give name of your post office, county and state, sign your name plainly; also specify means of conveyance preferred—whether by parcel post, express or freight.

## FREE DELIVERY OF SEEDS

**FREE DELIVERY.**—We will send by parcel post, to any part of the United States, all Vegetable and Flower Seeds quoted in this catalog, at packet, ounce, quarter-pound and half-pound rates, free of expense to the purchaser, excepting heavy seeds such as Peas, Beans, Corn, Clover Seed, Seed Grain, Roots, etc. These are quoted at net prices at our store. Purchasers desiring these by mail are requested to remit an additional amount sufficient to cover postage, at parcel post rates according to zone. Allow two pounds in weight for each quart of Peas, Beans or Corn. Particular attention is invited to this, as, when omitted, the cost of postage will be deducted from the amount received.

## SHIPPING

**SHIPPING.**—We deliver free to Express, Railroad or Boat. All goods travel at the buyer's risk; our responsibility ceases when we take the carrier's receipt. If goods are damaged, so sign for them and enter claim with the carrier at once.

## BAGS

**BAGS.**—On orders for seed requiring bags the cloth bags are charged for at cost and if returned in good condition, charges prepaid, will be credited at price charged on all except wholesale orders.

## REMITTANCE

**REMITTANCES.**—May be made by Express Money Order, Post Office Money Order or Bank Draft; if stamps or cash send in a Registered Letter. Parties having no account with us—who order goods without remittance—must furnish satisfactory references. Portland references preferred.

## PRICES

The pricing of all articles in the K. & W. 1927 CATALOG is carried out in good faith and it is our wish that they be maintained, but there are rare cases in which it is impossible to foresee a decline or rise in the producer's charge to us. **ALL PRICES ARE NET** and subject to change without notice in such instances of purchase as are beyond our control. Where seeds or equipment are for resale by the retailer, freight or express should be considered and added when quoting to the prospective purchaser.

## ALL CORRESPONDENCE ANSWERED PROMPTLY

Telephone Orders Given Immediate Attention. Call Portland—Forest-3953

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out and we will not be responsible for the crop.

Telephone **Kendall & Whitney** Portland  
Forest 3953 **Maine**





## SEEDS OF SERVICE

**B**Y THE presentation of this, the fifty-fifth annual catalog, designated as the 1927 issue, the company endeavors to place before its customers and friends, a comprehensive listing of flower and garden seeds, dairy and farm equipment and such other dependable merchandise as is related to the modern methods of tilling the soil, whether it be that person's vocation or avocation.

First in 1871,—a seed catalog with added sections devoted to a limited assortment of other farm merchandise, seemed necessary to better serve the patrons of this company and from that early time until now and during the years that intervened, the paramount thought has been, how best may we serve our patrons and manifest appreciation for their favors.

It is said that the K. & W. catalog is of the oldest standing in the State of Maine and the one you now have before you is the result of careful study over a period of fifty-five years, and by its every item we pledge you the honesty and integrity of our reputation.

**Kendall & Whitney**

# Unusual Offers

## SEEDS IN PACKETS OR OUNCES ONLY

The following may be selected from our catalog, at the prices named, and will be forwarded, postage free, to any part of the United States:

Purchasers remitting \$1.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 25 cents.

Purchasers remitting \$2.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 50 cents.

Purchasers remitting \$3.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.00.

☞ Seeds ordered in quantities larger than one-ounce packages are not to be included in making up the order, neither are plants or bulbs.

## Special to Market Gardeners

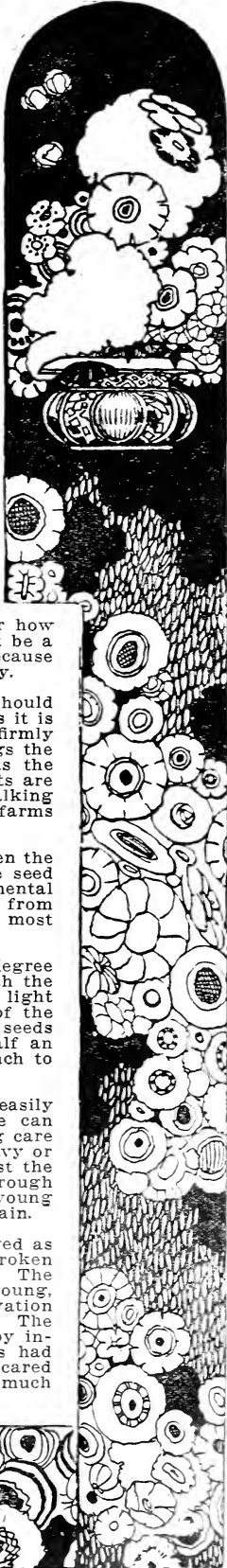
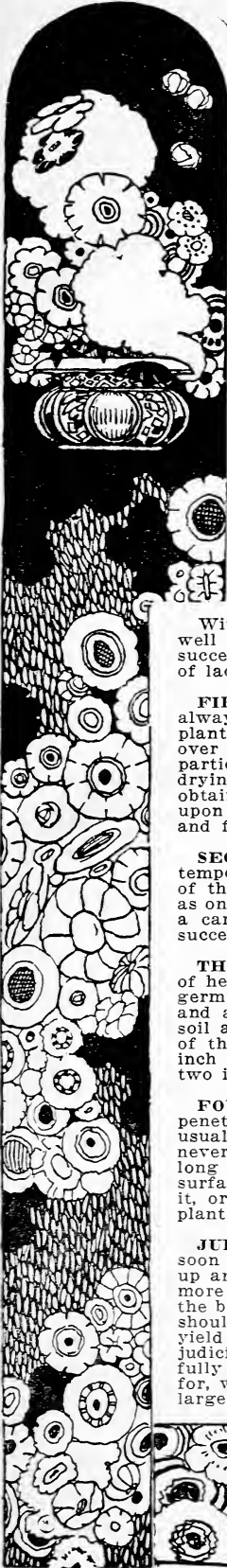
To market gardeners and users of seed in large quantities we quote special prices. When asking quotations please state the amount of seed which will be needed.

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The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



# *Beautiful Flowers and Good Vegetables Result From These Conditions*

Rich, sandy loam is the best, although fair results may be obtained from any soil which may be made rich and friable. Results cannot be expected on barren sand, or hard clay soils, nor under trees.

As a soil which does not need enriching is seldom found, fertilizer of some sort is necessary. Well decomposed stable manure is best, but if not available, sheep manure, poultry manure or wood ashes are of great benefit. If commercial fertilizer is used it may be applied at the rate of four to twelve pounds to the square rod, but must be thoroughly pulverized and mixed with the soil.

Good soil and sufficient fertilizer are not enough. The garden must be well plowed or spaded, using care, if the soil is a clay soil, that it is not too wet. When a handful of soil pressed into a ball may be easily crumbled again the conditions are right. After being plowed, the surface should be harrowed, or raked as fine as possible, and kept so until the seeds are planted.

With the soil prepared, the next thing is good seed, for no matter how well everything has been done, without good seed the result will not be a success. Do not forget that every season much good seed is lost because of lack of care in planting. Remember that five things are necessary.

**FIRST:** A proper and constant degree of moisture. The soil should always be moist, never wet. To secure this cover the seed as soon as it is planted with well pulverized, freshly prepared earth, pressing it firmly over the seed. This firming of the soil is very important, as it brings the particles of earth into close contact with seeds and roots, prevents the drying out of the soil and facilitates quick growth. The best results are obtained in small gardens by laying a board on the row and then walking upon the board, or the back of the hoe may be used; but for truck farms and field crops a roller is equally satisfactory.

**SECOND:** A proper degree of heat, secured by sowing the seed when the temperature of the soil is most favorable to the germination of the seed of that particular plant. Too high a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experience of the most successful gardeners in your vicinity.

**THIRD:** Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved the necessary air can readily reach the germinating seed, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches and peas one to three inches deep.

**FOURTH:** Such a condition of soil that the ascending stem can easily penetrate it and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground and taking care never to sow fine seeds when the ground is wet. Occasionally a heavy or long continued rain, followed by a bright sun, will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that the young plants will be killed. In such cases the only remedy is to plant again.

**JUDICIOUS CULTIVATION:** Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better; but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stirring of the surface. The yield and quality of vegetables have often been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns, in every way more satisfactory, than a much larger one poorly prepared and neglected.

## Descriptive List of Flower Seeds

### Annuals

These are plants which bloom the first season from seed, and are the most generally grown of all flowering plants. There is no place in the garden where some of them will not grow, and their bright colors are the source of continued enjoyment. A list of the perennials will be found on pages 14-15.

#### ABRONIA UMBELLATA



ABRONIA UMBELLATA

Handsone, trailing annuals, with clusters of sweet-scented flowers resembling the verberna. Fine for baskets or for the garden. Blooms from August until October . . . . . 10

#### ACROLINIUM

An elegant, half-hardy annual, producing beautiful everlasting flowers. Grows about one foot high. Mixed . . . . . 10

#### ADONIS

A hardy annual, with very pretty foliage, producing bright red flowers. Grows about one foot high and blooms for a long time. 10

#### AGERATUM



AGERATUM

Half-hardy, free-flowering annuals, blooming throughout the season. Fine for beds or borders. Fine Mixed. 1 ft. . . . . 10  
Imperial Dwarf Blue. 8 in. . . 10  
Perfection Dark Blue. 1 ft. . . 10



ALYSSUM

#### ALYSSUM

A hardy annual, about eight inches high, with clusters of small, fragrant flowers. Fine for bedding and bouquets.

Sweet. White; 1 ft. . . . . 10

Tom Thumb. Very dwarf; white . . . . . 10

### Beautiful Flowers and The Reason

A rich, sandy loam is best for most flowering plants.

It is best, except in the case of hardy annuals, to start the seeds in shallow boxes in the house and pick out and reset into another box so that the plants may be of good size and strong when ready to set in the garden.

When planted directly in the garden the soil should be fertilized and made very fine before sowing, and the plants afterwards thinned out, or transplanted to stand from two to twelve inches apart according to the variety. Do not cover too deeply. As a general rule, for the larger seeds cover from one-fourth to one-half inch, and for the very fine seeds merely press them into the soil with a piece of board. After sowing seeds press the earth firmly over them to prevent their drying up. If the weather is dry, water frequently with a fine spray.

Flower Seeds Sent Free by Mail on Receipt of Price.



ANTIRRHINIUM

#### ANTIRRHINIUM (Snapdragon) GIANT VARIETIES

Per Pkt.

A very showy and half-hardy perennial (used mostly, however, as an annual), about three feet high, flowering well the first season. Sow the seeds early, in pots or under glass. An improvement over the old variety, producing longer spikes and larger flowers.

Rose . . . . .	10
Scarlet . . . . .	10
Salmon . . . . .	10
White . . . . .	10
Yellow . . . . .	10
Yellow and Scarlet . . . . .	10
Mixed . . . . .	10

#### AMARANTHUS

Half-hardy annuals, about 2 feet high, with finely variegated foliage. They are most brilliant on poor soil and in dry seasons.

Tricolor . . . . . 10

#### AMMOBIUM ALATUM

A useful everlasting for making dried winter bouquets and a showy border plant, growing freely in any garden soil. Hardy annual.

White. 2 ft. . . . . 10

#### ANAGALLIS

Beautiful, trailing, hardy annuals, about six inches high and very desirable for small beds, edgings, baskets, etc.

Mixed . . . . . 10

#### ASPERULA

A most profuse-blooming, hardy annual, attaining an average growth of one foot, the flowers of which are a beautiful light blue, are very sweet scented, and last a long while in perfection. 1 ft. . . . . 10

#### ASTER

Very beautiful and popular half-hardy annuals, growing from ten to eighteen inches high. For profusion of flowers and richness of display, the asters are unrivalled. Sow the seed early in the spring, under glass or in pots in the house, and transplant into rich soil, about one foot apart.

## ASTER—Continued

## EARLY VARIETIES

**Queen of the Market.** Very early, blooming in July. Per Pkt.  
The flowers, while not so large as those of the later varieties, are of good size and on long stems. Mixed. 10

## MID-SEASON VARIETIES

**Victoria.** One of the finest for beds and borders. Grows about twelve inches high and blooms profusely.  
Mixed ..... 10  
White ..... 10

**Blush Queen.**

Large flowers of a delicate blush color, and borne in great profusion ..... 10

**Ostrich Feather.**

Very large bloom, with long fringe-like petals, similar in shape to Japanese chrysanthemum ..... 10

**Truffaut's Peony-Flowered Perfection.**

A beautiful early flowering variety. The flower is densely double, and the petals so symmetrically incurved as to resemble a perfect ball. Mixed colors; 2 ft. .... 10



PEONY-FLOWERED PERFECTION ASTER

## LATE VARIETIES

**Comet.** A variety of great beauty. Grows in pyramidal form thirteen to fifteen inches high, covered with large double flowers with long curled petals. Choicest mixed varieties ..... 10

**Carter's White Plume.** One of the most magnificent white asters yet produced; height about fifteen inches. 10

**Betteridge Quilled.** Perfectly double quilled flowers of beautiful mixed colors. .... 10

**Crego.** The finest of all comet asters, having immense flowers resembling chrysanthemums.

Lavender ..... 10  
Pink ..... 10  
White ..... 10  
Mixed ..... 10

**Semple's Branching.** A superior and free-flowering class. The flowers are large, with graceful, wavy petals on long stems. Either for cutting or bedding this is one of the most valuable asters. 2 ft. high.

Lavender ..... 10  
Pink ..... 10  
Crimson ..... 10  
White ..... 10  
Purple ..... 10  
Finest Mixed. All colors. .... 10

**Heart of France.** This recent introduction is the largest flowering of the very dark red sorts; plants grow about twenty-four inches high, nicely branched, bearing in September their large, rich, deep ruby-red flowers on long, strong stems; a fine, dark variety. .... 15

## BACHELOR'S BUTTON

Per Pkt.

A showy, hardy annual, about two feet high, succeeding well in any soil. Set six inches apart.

Finest Mixed. .... 10

Double Blue. .... 10



BACHELOR'S BUTTON

## BALSAM

Most magnificent, popular, half-hardy annuals, from one and one-half to two feet in height. Sow the seeds early in frames, and transplant to a well enriched border one foot apart.

Fine Double. Mixed. . 10

Rose-Flowered ..... 10

Camelia - Flowered.

Finest mixed ..... 10



DOUBLE BALSAM

## BEANS (Flowering)

Valuable for use of trellises and arbors, being highly ornamental and free climbers; plants are of strong, quick growth, bearing large sprays of handsome flowers.

**Scarlet Runner.** Very ornamental, bright scarlet flowers. 10

**White Runner.** Similar to above, flowers being white. 10

## BRACHYCOME IBERIDIFOLIA

(Swan River Daisy)



SWAN RIVER DAISY

Very pretty, free-flowering, dwarf-growing annual; well adapted to edgings, rustic baskets, or pot culture.

Mixed Blue and White. ½ ft. .... 10

## Stim UplanT

Makes a  
Wonder Garden

## BROWALLIA

Handsome profuse-blooming annual, covered with beautiful flowers during the summer and autumn months.

**Elatea Coerulea.** Blue; 1½ ft. .... 10

**Alba.** White; 1½ ft. .... 10

**Fine Mixed** ..... 10

## BLUE LACE FLOWER

This pretty annual blooms freely from July to November. The blossoms are pale lavender, and are excellent for cutting, as they last a long time in water. Plants grow about eighteen inches high. Seed may be sown outdoors when the trees are in leaf. .... 15



## CALENDULA



## CALCEOLARIA

Indispensable for the greenhouse or the flower garden. They succeed in any light, rich soil. Half-hardy perennials.

Choice Mixed Varieties.. 25



CANDYTUFT

**Crimson.** Ounce 35c. .... 10  
**Purple.** Ounce 35c. .... 10  
**White.** Ounce 35c. .... 10  
**Finest Mixed.** Ounce 30c. .... 10

## CANARY BIRD FLOWER

A rapid-growing, delicate climber, reaching a height of from ten to fifteen feet. Bright yellow, fringed; exceedingly beautiful foliage. Half-hardy annual. .... 10

## CANNA

Handsome foliage plants, growing from three to eight feet high. Highly ornamental on the lawn. Soak the seed in warm water for about twelve hours. Seeds should be sown early in a strong, moist heat.

Finest Mixed ..... 10

## CATCHFLY

A hardy annual, about one foot high; produces brilliant flowers in great profusion in early summer.

Mixed ..... 10

## CENTAUREA

Silver-leaved plants, fine for ribbon borders, baskets, etc.

**Candidissima.** Thick foliage;  $\frac{3}{4}$  ft. .... 10

**Gymnocarpa.** Graceful white foliage;  $\frac{3}{4}$  ft. .... 10



CALCEOLARIA

## CANDYTUFT

A well-known, hardy annual, very useful for bedding and bouquets, and also for pot culture.

**Empress.** Large trusses of pure white flowers; very handsome. Used for forcing. Ounce 40c. .... 10

**Little Prince.** Large heads of pure white flowers. Plants about six inches high. Ounce 40c. .... 10



CANARY BIRD FLOWER

## CINERARIA

Per Pkt.

Well-known favorite, free-flowering plants for the greenhouse, which may be had in splendid bloom through the greater portion of the year, and from the richness and diversity of the colors are among the most valuable of our early spring flowers; succeed best in light, rich, free and open soil. Greenhouse perennial.

**Carter's Brilliant Prize.** Choicest varieties. .... 25  
**Finest Mixed Varieties** ..... 25

## CHRYSANTHEMUMS

## Annual

The annual chrysanthemums are free-blooming, easily grown plants. They have large, daisy-like flowers in a variety of brilliant colors and are fine for cutting.

**Double White** ..... 10  
**Double Yellow** ..... 10  
**Double Mixed** ..... 10



CLARKIA

## CLARKIA

A very beautiful hardy annual, about eighteen inches high, blooming from June to September. Set six inches apart.

**Finest Mixed.** Ounce 30c.. 10



COBÆA SCANDENS

## COBÆA SCANDENS

The most useful of climbers, on account of its rapid growth, fine foliage, and large, bell-shaped flowers, purple in color. In sowing place the seeds edgewise and cover lightly ..... 10

## COCKSCOMB

Very singular and attractive, half-hardy annuals, about two feet high. To perfect the flowers they should be sown in the hotbeds and transplanted into rich soil one foot apart.

**Mixed. Double** ..... 10

## COLEUS

One of the most popular foliage plants. Is very decorative in the flower border, and easily grown from seed, which frequently produces new and distinct varieties.

**New Hybrid. Mixed** ..... 15



MORNING GLORY

## CONVOLVULUS MAJOR

## (Morning Glory)

A well-known beautiful, climbing annual, suitable for covering arbors, trellises, etc. Blooms from July until autumn.

**Finest Mixed.** Ounce 15c. 10

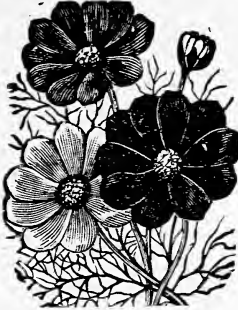
**Japanese.** Gigantic flowers, exquisite new colors, magnificent foliage.

**Finest Mixed** ..... 10

COREOPSIS  
COSMOS

Splendid flower for cutting purposes, plants growing five to seven feet high, which are beautiful masses of the most elegant foliage, with hundreds of large, showy blossoms. Both foliage and flowers are excellent for cutting. Sow seed early in spring and transplant to the garden in June.

**Early Flowering.** Mixed colors..... 10  
**Lady Lennox.** Tall growing, late variety, with gigantic shell-pink flowers, borne on long stems..... 10



COSMOS

## CYPRUS VINE

One of the most popular of all summer climbers; flowers small, thickly set in a most beautiful dark-green foliage, forming a striking contrast. Tender annuals.

**Scarlet** ..... 10



DAHLIA

## DAHLIA

Plant in a shallow box or pan early in March or April, transplant carefully and keep the soil moderately moist. When all danger from frost is over set out in the bed or border in the garden.

**Finest Mixed.** Single.. 10  
**Finest Mixed.** Double.. 10

## DATURA

Beautiful, half-hardy annual, growing from two to three feet in height and producing very large flowers; continues in bloom from July until September.

**Mixed** ..... 10

## DRACOENA

Beautiful, ornamental-leaved plant, extensively used in vases and for house decoration.

**Indivisa.** Narrow, dark green foliage..... 10

ESCHSCHOLTZIA  
(California Poppy)

A very showy, hardy annual, about one foot high, blooming from June until September. Produces a brilliant effect; admirable for borders when grown in a mass.

**Californica.** Yellow; orange center ..... 10

**Mandarin.** Orange and scarlet ..... 10

**Finest Single Mixed.** ..... 10

**Carter's Carmine King.**  
 A splendid new variety, of a beautiful carmine-rose color ..... 10



ESCHSCHOLTZIA

## COREOPSIS

Per Pkt.

Showy, hardy annuals about two feet high, succeeding well in any soil. Produces a fine effect when grown in a mass. Blooms from June until September.

**Fine Mixed** ..... 10  
**Drummond's.** Large yellow ..... 10

## FEVERFEW (Pyrethrum)

Per Pkt.

Handsome, free-flowering, highly ornamental plants, producing a fine effect in the mixed flower and shrubby borders. Succeeds in any rich soil.

**Double White** ..... 10  
**Golden Feather.** Yellow foliage. Fine for edging flower beds ..... 10

## GAILLARDIA

Showy and universally-admired annual. Very beautiful; fine for bedding and bouquets. Flowers two to three inches across, blooming until late in the fall.

**Fine Mixed** ..... 10

## GOURDS

A valuable and highly interesting class of climbing plants. Tender annuals.

**African Pipe.** The stem end used in making pipes... 10

**Bottle.** Well known, bottle shaped..... 10

**Hercules Club.** Club shaped; very long..... 10

**New Miniature.** Orange and green striped; one of the best ..... 10

**Orange.** Very ornamental, fruit resembling an orange. 10

**Powder Horn** ..... 10

**Fine Mixed** ..... 10

## GLOBE AMARANTH

A tender annual, about two feet high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open. Start early in hotbeds, and transplant one foot apart in the border when the weather becomes warm.

**Mixed** ..... 10



GLOXINIA

## GLOXINIA

Greenhouse plants, producing richly colored and brilliant flowers. Greenhouse perennial.

**Carter's Invincible Prize.** Contains all the best self-colors, crimson, sapphire, purple, ruby, rose, bluish violet and white, together with the most beautiful spotted or marbled kinds ..... 25

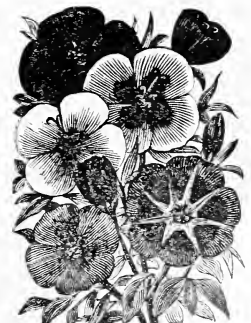
## Stim Uplant

Makes a  
Wonder Garden

## GODETIA

Very attractive hardy annual of easy culture, about one foot high, flowering in July and August.

**Fine Mixed** ..... 10



GODETIA

**GREVILLEA ROBUSTA**

Per Pkt.

A very graceful decorative plant, with evergreen, fern-like foliage. Excellent for table decoration..... 10

**GYPSOPHILIA**

A free-flowering annual that should be in every garden, for it thrives abundantly, furnishing the loveliest material for bouquets.

**Elegans.** Hardy annual; pure white..... 10

**HELICHRYSUM (Eternal Flower)**

A hardy annual, very ornamental in the garden, and very desirable for winter bouquets, as they will retain their form and color for years if gathered and dried when first open.

**Double Yellow** ..... 10

**Double White** ..... 10

**Double Scarlet** ..... 10

**Double Purple** ..... 10

**Double Fine Mixed** ..... 10

**HELIOTROPE**

A well-known, half-hardy perennial, particularly prized on account of its delightful fragrance. It is well adapted for bedding or pot culture. Sow the seeds early in spring, in pots or in the hothouse, and transplant into the garden when the weather becomes warm.



HELIOTROPE

**Finest Mixed.** Dark varieties ..... 10

**HUMULUS (Japan Hop)**

Rapid summer climber, resembling the common hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., producing grateful shade and being very ornamental. Heat, drought and insects do not trouble it... 10

**HYACINTH BEAN**

Tender, climbing annual, producing clusters of blue and white flowers; 10 ft. .... 10

**ICE PLANT**

A singular-looking, tender annual, with thick, fleshy leaves that have the appearance of being covered with crystals of ice. Start early in pots and transplant into light, sandy soil, in a warm situation..... 10

**IPOMCEA (Moon Flower)**

The ipomceas are climbers of rapid growth and bear immense fragrant flowers of glistening white seven to eight inches across. The flowers open at sunset and close the next morning. To hasten germination soak seed in warm water a few hours. Flowers large, white. 10

**KOCHIA TRICHOPHYLLA (Glowing Ball)**

This ornamental annual plant grows quickly from seed sown in the open ground, when the trees are coming out in leaf, and the plants are always of a rounded or globe-like form. The stems are clothed with slender, light green leaves. Early in the fall the ends of the shoots are set thickly with small, bright scarlet flowers, the bushy plants resembling balls of fire. The plants are equally showy planted singly to show the round ball-like form on all sides or grown in continuous rows..... 10

**LANTANA**

Per Pkt.

Highly valuable plant of vigorous growth and branching habit, producing brilliantly-colored flowers constantly changing in hue. Very effective, either for pot culture or for bedding.

**Fine Mixed** ..... 10

**LARKSPUR**

Very beautiful, showy annuals, producing dense spikes of flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart. Blooms from July until frost.

**Dwarf Double Rocket.** Finest mixed. 1 ft..... 10

**Double Branching.** Fine mixed. 2 ft..... 10

**LAVENDER**

A shrubby plant, blossom of delightful fragrance.... 10

**LINUM (Flowering Scarlet Flax)**

**Grandiflorum Rubrum.** Brilliant, dark scarlet. Hardy annual ..... 10

**LOBELIA**

Most excellent and useful plants, free-flowering and of easy culture. Fine for borders, baskets, vases and window boxes.

**Gracilis.** Fine for hanging baskets, vases, etc.; light blue; trailing ..... 10

**Crystal Palace.** Compact; dark blue; excellent for edging ..... 10

**White Gem.** The best white variety for edging..... 10

**Cardinalis.** Long spikes, bright scarlet flowers..... 10

**LOVE-LIES-BLEEDING**

A hardy annual, three to four feet high, with pendant spikes of blood-red flowers..... 10

**LOVE-IN-A-MIST (Nigella)**

A curious, hardy annual about one foot high, with finely cut leaves and singular flowers.

**Mixed** ..... 10

**LUPINUS (Lupine)**

This is a very interesting class of plants and of easy culture, producing beautiful leaves and pea-shaped flowers, and should be more generally cultivated. The annual varieties may be sown out in the open in May and as plants grow thin out, leaving about twelve inches between the plants.

**Fine Mixed Annual**..... 10

**MARVEL OF PERU (Four O'clock)**

The old and well-known four o'clock. A beautiful plant, with flowers of various colors, making a fine summer hedge when set one foot apart. Grows two feet high.

**Fine Mixed** ..... 10

**MAURANDIA**

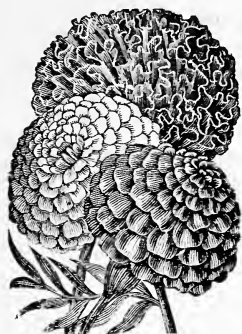
An elegant, half-hardy, climbing plant, blooming the first season if sown early, and is well adapted to the conservatory or trellis work in the garden. Start early in pots, transplant when the weather becomes warm. Continues in bloom through the season.

**Barclayana.** Rich violet flowers..... 10

**MORNING GLORY (See Convolvulus)**



## MARIGOLD



MARIGOLD

Per Pkt.

Extremely showy, half-hardy annual, one to two feet high, well adapted to garden culture, blooming profusely through the season. Set one foot apart. The African varieties are the taller in growth, and produce large self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted. The dwarf-growing kinds make extremely handsome borders, remaining in full bloom until killed by frost.

## DOUBLE AFRICAN

**Orange Prince.** Large deep orange flowers, very showy. About two and one-half feet high. .... 10

**Lemon Queen.** Similar to the Orange Prince, except in color, which is lemon yellow. .... 10

**Double Mixed** ..... 10

## DWARF FRENCH

**Double Mixed.** About one foot high. .... 10

**Legion of Honor.** Single, about nine inches high; golden yellow, with large spot of velvety crimson. .... 10

## MOURNING BRIDE (Scabiosa)

These beautiful, hardy annuals are in great demand. They grow about two and one-half feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are much in demand. The various shades are very charming, but are equally well adapted for borders or beds, where they display themselves very effectively. Seeds should be sown any time in the spring after danger of frost is past.

**Purple** ..... 10

**Red** ..... 10

**White** ..... 10

**Finest Mixed** ..... 10

## MIGNONETTE

A well-known, hardy annual, universally grown and esteemed for its delicious fragrance. Sow in light soil one-fourth inch deep and thin to six inches deep in the row.

## Mignonette, Sweet.

Large-flowered variety, very fragrant. Per ounce, 20c... 10

## Allen's Defiance.

Spikes of immense size, sometimes growing under favorable conditions twelve inches long. Are very fragrant and keep for a long time in water. .... 10

## Machet.

The finest variety for pot culture; of dwarf growth, with sweet-scented, red flowers. .... 10

## White Pearl.

Flowers nearly white; a desirable variety. .... 10

## Gabriele.

A variety of dwarf pyramidal growth with large spikes of reddish flowers; fine for pots, or in the open ground. 10



MIGNONETTE

## MIMULUS

Per Pkt.

Handsome, profuse-blooming plants, with flowers of singular form and brilliant colors, fine for greenhouse or shady situations. Blooms from seed the first year if sown early.

**Fine Mixed** ..... 10

## MUSK PLANT

Fine for hanging baskets. Color yellow. Sweet scented. 10

## Stim Uplant

Makes a  
Wonder Garden



NEMOPHILA

## NEMOPHILA

Charming hardy, low annual, producing an abundance of extremely delicate and beautiful flowers. Very useful for bedding or for pot culture. Sow early in pots and transplant into a cool, rather moist, location.

**Insignis.** Clear, bright blue, white center ..... 10

**Finest Mixed** ..... 10

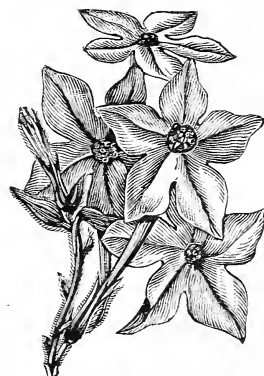
## NICOTIANA

Deliciously fragrant flowers, very ornamental, of easy cultivation, excellent for cutting. Half-hardy annuals.

**Affinis.** White, very fragrant ..... 10

**Sylvestris.** Plants of pyramidal growth, about four feet high. Flowers pure white and very fragrant ..... 10

**Sanderae.** Branching habit; two feet. Strikingly beautiful plants. Blossoms brilliant carmine-red; delicious fragrance ..... 10



NICOTIANA

## NOLANA

Very pretty trailing, hardy annuals; fine for rockwork, hanging baskets or for bedding. Select light, rich soil. **Fine Mixed** ..... 10

## OXALIS

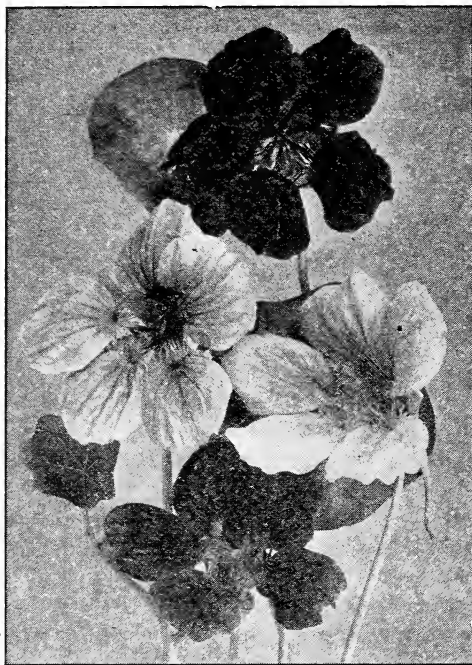
Elegant flowering plants, particularly adapted for the greenhouse or parlor, where they bloom in mid-winter. **Fine Mixed Varieties** ..... 10

## OENOTHERA (Evening Primrose)

A half-hardy annual and perennial, about six inches high, bearing bright, showy flowers in white, pale yellow, rose, etc. Of the easiest culture.

**Mixed Annual Sorts** ..... 10

**Mixed Perennial Sorts** ..... 10

**NASTURTIUM**

One of the most popular flowers of the present time, and constantly growing in favor. Is a rapid climber, of easiest culture, bearing beautifully colored flowers in profusion until killed by frost. Hardy annual.

The "K. & W." Mixed Varieties, both Tall and Dwarf, cannot be surpassed for brilliancy and variety of color. The plants, for about three months in the year, produce a lavish profusion of bloom, even through the hottest weather, and a trial of them is sure to give great satisfaction.

**NASTURTIUM (Tall)**

	Per Pkt.
<b>Crimson</b> .....	10
<b>Dunnett's Orange.</b> Pure orange.....	10
<b>Eduard Otto.</b> Brownish lilac.....	10
<b>Heinemanni.</b> Chocolate color.....	10
<b>Pearl.</b> Creamy white.....	10
<b>Prince Henry.</b> Cream, spotted and tipped scarlet....	10
<b>Regelianum.</b> Purplish violet.....	10
<b>Scarlet</b> .....	10
<b>Shellinghi.</b> Yellow spotted.....	10
<b>Scheucranum.</b> Straw colored, spotted brown.....	10
<b>Vesuvius.</b> Salmon-rose; an exquisite shade.....	10
<b>Von Moltke.</b> Dark rose.....	10
<b>Yellow</b> .....	10

**"K. & W." Mixed Varieties**

1 lb.	¼ lb.	½ lb.	1 oz.	Pkt.
\$1.25	.70	.40	.15	.10

COLLECTION OF 6 PKT.: 50

**PRICE CHANGES**

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

**NASTURTIUM—Continued**

Per Pkt.

**NASTURTIUM (Dwarf)**

The dwarf improved varieties of nasturtium are among the most useful and beautiful of garden favorites for bedding, massing or ribboning. Hardy annuals.

<b>Bronze.</b> Bronze-orange .....	10
<b>Cloth of Gold.</b> Scarlet flowers and yellow foliage....	10
<b>Crimson</b> .....	10
<b>Crystal Palace Gem.</b> Sulphur, maroon blotches....	10
<b>Empress of India.</b> Fiery crimson, dark foliage.....	10
<b>Golden King.</b> Rich, golden yellow.....	10
<b>King Theodore.</b> Deep crimson maroon, dark foliage.	10
<b>King of Tom Thumbs.</b> Dark scarlet, dark leaves...	10
<b>Lady Bird.</b> Orange-yellow; suffused with red and a bright red blotch at the base of the petals.....	10
<b>Ruby King.</b> Rich crimson rose.....	10
<b>Scarlet</b> .....	10
<b>Spotted.</b> Golden yellow, spotted garnet.....	10
<b>Yellow</b> .....	10

**"K. & W." Mixed Varieties**

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.25	.70	.40	.15	.10

COLLECTION OF 6 PKTS., 50

**SWEET PEAS****Culture**

Early in spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it, and plant the seed in the bottom, covering at first only one inch deep. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the trench and sow the seed on this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun, but remove this as soon as the young plants appear.

When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon, preferably a wire netting firmly supported by stakes to prevent sagging, but strings or brush are often used with satisfactory results.

The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week, preferably early in the morning or in the evening, is usually better than light sprinkling more frequently.

The blooms should be picked before they form pods or the plants will soon stop flowering.

**GRANDIFLORA TYPE**

Owing to the increased demand for the Spencer sweet peas, and the fact that many of the named varieties of the Grandiflora type are one and the same, we have discontinued cataloging the named varieties of Grandiflora sweet peas and will list only the different colors, for which we will select what we consider the best.

**White; Light Pink; Deep, Bright Pink; Pink and White; Red; Lavender; Blue.**

**"K. & W." CHOICE MIXED.** This magnificent assortment is a mixture of the finest varieties produced, the flowers being of the largest sorts, and so combined as to give the most delightful harmony of colors. Fine mixed.

**Price, Any of the Above**

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.00	.55	.35	.15	.10

**SWEET PEAS—Continued****SUPERB FLOWERED****SPENCER VARIETIES**

The Waved or Spencer class represents a type of sweet pea the original of which, the Countess, is still the best and most popular pink. They are strong growers, bear long stems and very large blossoms, with usually four blossoms to a stem. The standard is large, round, and fluted or wavy on the edges. The wings, too, are large and more or less wavy, but not so much so as the standard.

The following named varieties constitute a list of many of the finest strains produced, a majority being recommended by the National Sweet Pea Society:

	Pkt.	Oz.
<b>WHITE</b>		
Dobbie's Nora Unwin. Very white.....	10	20
King White. Giant white; the largest white Spencer type .....	10	20
White Spencer. Large pure white.....	10	20
<b>PRIMROSE, CREAM OR IVORY</b>		
Mrs. C. W. Breadmore. Primrose, with rose edge .....	10	20
<b>LIGHT PINK SHADES</b>		
Apple Blossom. Rosy pink, blended with light blush .....	10	20
Countess. Fine pure, clear pink; very large.	10	20

<b>DEEP, BRIGHT PINK</b>		
Hebe. Giant rosy pink.....	10	20
New Marion Beaver. Finest shade of pink. Color salmon shell-pink on cream.	10	20
Rosabelle. Giant rosy pink.	10	20
Sunset. Bright rose .....	10	20

<b>ORANGE AND SALMON</b>		
Barbara. Handsome large salmon orange .....	10	20
Illuminator. Salmon cerise and orange .....	10	20
Melba. Pale salmon .....	10	20

<b>SHADES OF RED</b>		
Crimson King. The largest crimson .....	10	20
Dobbie's Improved Crim- son. Finest crimson.....	10	20
Doreen. Bright carmine, very large .....	10	20
King Edward. Pure, deep red; very large.....	10	20
Vermilion Brilliant. In- tense, bright scarlet.....	10	20

<b>EDGED</b>		
Blue Picotee. White, with blue edge .....	10	20
Dainty. White, with rose pink edge .....	10	20

<b>LAVENDER SHADES</b>		
Asta Ohn. Pinkish lavender.	10	20
Dobbie's Orchard. Large mauve lavender .....	10	20
Florence Nightingale. Soft bluish lavender .....	10	20

<b>SHADES OF BLUE</b>		
Flora Norton. Light blue..	10	20
Mrs. Tom Jones. Best of deep blues .....	10	20

**SWEET PEAS—Continued****PURPLE AND MAROON**

Royal Purple. Rich, deep purple..... 10 20

Senator. Chocolate, purple and white, striped. 10 20

**MIXED VARIETIES** ..... 10 20

1 lb.      ½ lb.      ¼ lb.  
\$2.25      \$1.25      .70

**TWO SUPERB****NEW SPENCER SWEET PEAS**

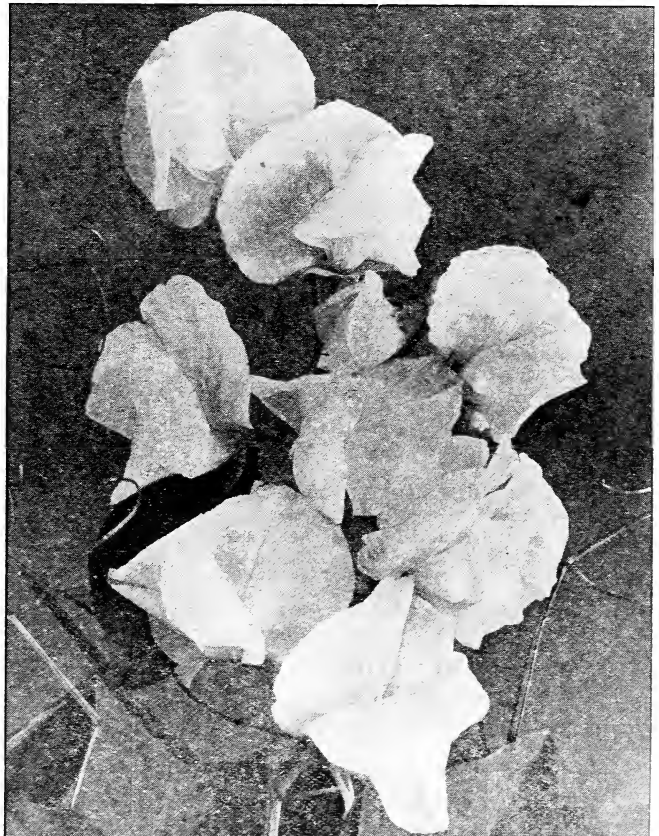
**MISS CALIFORNIA.** The greatest advance in pink sweet peas. Color a beautiful orange-salmon cream pink of a distinctively new shade. The flowers are large, waved, and borne in fours on long, stout stems.

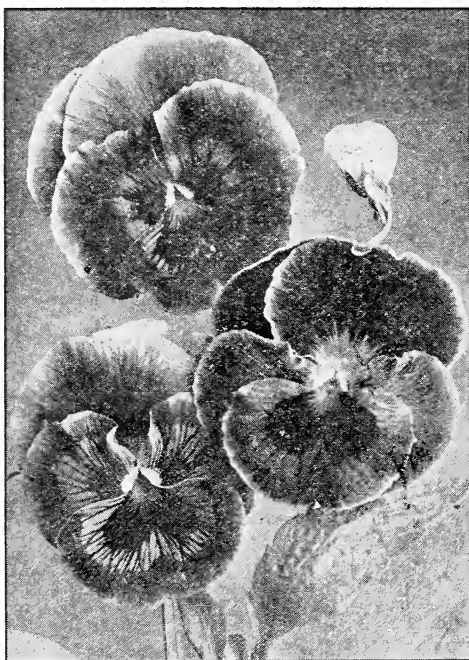
Price in original sealed packets, 25c. pkt.

**YOUTH.** An exceptionally large and fragrant sweet pea. The color is white, edged with a delicate soft rose pink. The plant is of robust growth and bears four-blossom sprays in great profusion.

Price: Pkt., 25c.; oz., 40c.

**INOCULATE THIS  
SEED WITH  
FARMOGERM**

**SWEET PEAS**



PANSY

Per Pkt.

Good results may be obtained from sowing seed in May in a light, cool, but well moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, they should be transplanted to a distance of one foot apart. Where greenhouse and cold frame facilities are at hand, seed may be sown in July or August and plants protected during winter.

**"K. & W." Extra Choice Mixed.** This is a mixture composed of the finest varieties of large flowering pansies and for years has been giving splendid satisfaction. 10

**Non Plus Ultra.** A mixture of pansies designed for the buyer who wishes his beds of the finest colors and greatest variety possible. 15

**Odier.** Finest blotched. 10

**Madam Perrot.** A new French strain. Flowers large size, in many colors, especially red, and nine shades. 20

## GIANT TRIMARDEAU PANSIES

A strain of pansies having very large flowers.

**Giant King of the Blacks.** Velvety jet black. 10

**Giant Blue.** Beautiful light blue. 10

**Giant Yellow.** Pure golden yellow. 10

**Giant Purple.** Dark, rich purple. 10

**Giant White.** Pure white; dark eye. 10

**Giant Mixed.** 10

## PASSION FLOWER

A splendid class of climbers, with curious flowers produced in great profusion; fine for conservatory or will answer for the garden, flowering freely during the autumn.

**Fine Mixed.** 10

## PERILLA NANKINENSIS

An annual, growing from two to two and one-half feet; stems branching, well covered with an ample foliage of a dark purple, almost black. 10



PETUNIA

Per Pkt.

## PETUNIA

Favorite, hardy annuals, succeeding well in any rich soil. For the brilliancy and variety of their colors, their abundance of flowers and the long duration of their blooming period, they are indispensable in any garden.

## Double Fringed.

Extremely double, edges finely fringed, petals fluted and crinkled, unmatched by crumpled velvet, which the flowers resemble. 25

## Single Fringed.

Choicest fringed sorts. 20

**California Giants.** A strain of incomparable beauty, size and luxuriance. The flowers are exquisitely ruffled or fringed on the edges, and are enormous. 25

**Rosy Morn.** Soft carmine-pink, white center; used very extensively for borders, beds or rockeries. 10

**White.** Single, large, pure white. 10

**Balcony Blue.** Indigo blue. Flowers very large. 15

**Fine Mixed.** Single varieties. 10

## PHLOX DRUMMONDI

The flowers are of extreme beauty, and are greatly admired by all. Their long duration in bloom, combined with their almost unequalled richness of color, make them invaluable in the general flower garden. Hardy annuals.

**Pure White.** 10

**Pure Deep Scarlet.** 10

**Rose.** 10

**Yellow.** 10

**Crimson.** 10

**Finest Mixed.** Oz., \$1.00. 10



PHLOX

## PHYSALIS (Chinese Lantern Plant)

**Francheti.** An ornamental plant, forming dense bushes about two feet high, producing freely its bright orange-scarlet, lantern-like fruits, which can be cut and dried for winter bouquets. Highly interesting. 10

## PINK (Dianthus)

One of the most popular flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom.

**Heddeewigi.** Flowers very large, and of rich and brilliant color. Hardy annual. 10

**Chinese.** Splendid double mixed. 10

**CARNATION "MARGUERITE."**

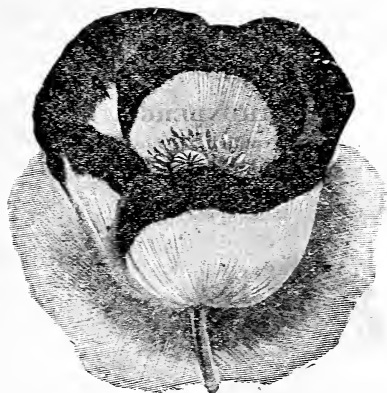
Very early, and when sown in the spring will bloom in July or August and continue until frost, or may be potted to bloom in the house during the winter. Many of the flowers are double, and are finely fringed and fragrant.

**Giant Mixed.** Extra large, flowering profusely, in brightest colors. 10



HEDDEEWIGI PINK

## POPPY



ADMIRAL POPPY

Brilliant and showy, hardy annual, growing freely in any garden soil. Sow as early in spring as the weather will permit at intervals for a succession. Barely cover seed; **PRESS DOWN FIRMLY**, and when up thin to six inches apart. 2 ft.

### DOUBLE FLOWERING VARIETIES

- |   |             |
|---|-------------|
| <b>Cardinal.</b> Dark foliage, deeply cut; very double fringed flowers. Color vivid scarlet.....  | Per Pkt. 10 |
| <b>Mikado.</b> Double white, fringed flowers, crimson margins .....   | 10          |
| <b>White Swan.</b> The acme of perfection in double poppies. The profusely produced blossoms are perfectly formed, and the purity of their color is beyond reproach ..... | 10          |
| <b>Peony Flowered.</b> Resemble a double peony. Mixed. 10   |             |
| <b>Carnation Flowered.</b> Double fringed flowers. Mixed. 10  |             |

### SINGLE FLOWERING VARIETIES

- |   |    |
|---|----|
| <b>Admiral.</b> Single, peony-flowered variety. Glistening pure white, with scarlet band around the top; very handsome .....                            | 10 |
| <b>Peacock.</b> Cup-shaped, crimson blossoms, with ring of black at base of the petals; equally good for pots or borders .....                          | 10 |
| <b>SHIRLEY.</b> Beautiful strain of single mixed poppies; bright, delicate colors; fine for cutting .....   | 10 |
| <b>Tulip.</b> Grows twelve to fourteen inches high, and produces well above the foliage fifty to sixty large flowers of the most brilliant scarlet..... | 10 |
| <b>Iceland.</b> Blooms the first year from seed. Colors range from white to orange.....   | 10 |

## PORTULACA



PORTULACA

Very popular, low-growing, hardy annuals, making a most brilliant display in the garden, and very suitable for borders or edgings. Sow early in warm, light, rich soil and thin plants to 4 inches.

- |                                |    |
|--------------------------------|----|
| Single Crimson .....           | 10 |
| Single Scarlet .....           | 10 |
| Single White .....             | 10 |
| Single Yellow .....            | 10 |
| Single, All Colors Mixed ..... | 10 |
| Double, Finest Mixed .....     | 10 |

### PRINCE'S FEATHER

Ornamental plants, with elegant plumes of rich colored flowers.

- |  |    |
|--|----|
| <b>Large Flowered.</b> Crimson; 2 ft. .... | 10 |
|--|----|



RHODANTHE

### RICINUS (Castor Bean)

Plants with very ornamental foliage and showy fruit and quite a tropical appearance. With other ornamental-leaved plants, they make a most attractive bed on the lawn, and are also desirable when grown as single specimens. Half-hardy annuals.

#### Barbonensis Arboreus.

Beautiful, large green foliage; 10 ft. .... 10

**Cambodgensis.** Dark foliage; black stem; 9 ft. .... 10

**Sanguineus.** Scarlet fruited; 6 ft. .... 10

**Zanzibariensis.** Immense, dark green foliage; 12 ft. 10

**Mixed Varieties** ..... 10



RICINUS

## ROSE CAMPION

The rose campion is perfectly hardy and very easily raised from seed. The flowers are produced on long stems, blooming freely throughout the season.

**Fine Mixed** ..... 10



SALPIGLOSSIS

### SALPIGLOSSIS

Very beautiful, rich, half-hardy annuals, one and one-half feet high. Start early in the hotbed and transplant to light, warm, rich soil. Blooms from July to September.

**Fine Mixed** ..... 10

**Stim Uplant**  
Makes a  
Wonder Garden

### SALVIA

Very ornamental, producing tall spikes of brilliant flowers. Start early in hotbeds and transplant two feet apart. Half-hardy annual.

**Splendens.** Brilliant scarlet flowers ..... 10

**Bonfire.** This variety is one of the finest salvia for bedding yet introduced. The plants grow into very compact oval bushes about two and one-half feet high, and produce long spikes of brilliant scarlet flowers ..... 10



SALVIA



**SCHIZANTHUS**

Per Pkt.

Tender annual, one to one and one-half feet high, producing quickly such a mass of flowers as almost to hide the foliage. Blooms from August to October. Fine for pot culture.

**Fine Mixed** ..... 10

**SENSITIVE PLANT**

A pretty, curious annual, being so sensitive that the leaves close together at the slightest touch. .... 10

**SMILAX**

A beautiful winter climbing plant, adapted to to conservatory. Nothing can excel this plant in beauty of foliage and orange fragrance of the flower. Extensively used for bouquets and floral decoration of every description ..... 10

**STOCKS**

Half-hardy annual, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flowering sow early in the spring, in pots or in the hotbed, and transplant one foot apart. Blooms from June until October.



STOCKS

**EARLY LARGE-FLOWERING WINTER STOCKS**

**Beauty of Nice.** Strong spikes, with large flowers of a delicate flesh pink. .... 10

**Queen Alexandra.** New. Rosy lilac. Splendid... 10

**CUT AND COME AGAIN STOCKS**

Plants of robust growth and branching habit. If sown early commences blooming in June and continues until frost, producing flowers in September and October, when other varieties have faded. Fine for cutting.

**All Colors Mixed**..... 10

**Princess Alice.** White ..... 10

**LARGE FLOWERING TEN WEEKS STOCKS**

**White.** Ten weeks, double..... 10

**Purple.** Ten weeks, double..... 10

**Scarlet.** Ten weeks, double..... 10

**Mixed.** Ten weeks, double..... 10

**SUNFLOWER**

Well-known, showy plants; remarkable for their rapid and stately growth and the large size and brilliancy of their flowers.

**California.** Double, bright yellow flowers..... 10

**Mammoth Russian.** Very large flowers; single.... 10

**New Miniature.** An improvement on the miniature. covered with hundreds of brightest orange flowers. The blooms are of a variety of shades, sizes and shapes of petals ..... 10

**SWEET SULTAN**

Showy, hardy annual, one to two feet high, succeeding well in any soil. The beautiful, sweet-scented flowers are borne on long, stiff stems, making them well adapted for cutting.

**Fine Mixed** ..... 10

**TASSEL FLOWER**

Per Pkt.

A beautiful, half-hardy annual, with small, tassel-like flowers, blooming profusely from July to October.

**Scarlet** ..... 10

**THUNBERGIA**

Very ornamental, trailing, half-hardy annual, admirably adapted for trellis or rustic work, or for the conservatory.

**Fine Mixed** ..... 10

**VERBENA**

Well-known and universally popular bedding plant, blooming all summer. Plants grown from seed are more healthy and make larger and harder plants than those from cuttings. If sown in spring will flower quite early. For best results sow in house or hotbed and transplant.

**Candidissima.** Pure white ..... 10

**Scarlet Defiance.** Brightest scarlet.. 10

**Mammoth Finest Mixed** ..... 10



VERBENA

**VISCARIA**

Very pretty, profuse-flowering, half-hardy annual, producing a fine effect in beds or mixed borders, and growing readily in any soil

**Fine Mixed** ..... 10

**WALLFLOWER**

Very fragrant and ornamental, suitable for background and amongst shrubbery.

**Fine Mixed** ..... 10



WHITLAVIA

**WHITLAVIA**

Charming, hardy annual, with delicate foliage and clusters of beautiful, bell-shaped flowers; fine for ribboning or mixed borders; 1 ft.... 10

**Fine Mixed**..... 10

**Stim Uplant**

Makes a  
Wonder Garden

**WILD CUCUMBER VINE**

A very rapid-growing climber which reaches a height of fifteen or twenty feet during the season. It is covered with clusters of white, sweet-scented flowers, followed by an abundance of ornamental prickly seed pods. It will quickly cover a trellis, pillar or an unsightly building, and will reproduce itself from self-sown seed every year. Soak seed over night in warm water. Hardy annual ..... 10

## WILD GARDEN SEED

Per Pkt.

A mixture composed of a large number of varieties of flower seeds. These are usually sown in a bed by themselves..... 10

## ZINNIA

A most splendid class of hardy annuals, and one of the finest summer flowering plants. The flowers are large, handsome, and in a very great variety of colors, blooming throughout the whole season. Start early in pots or under glass and transplant one foot apart.



DOUBLE ZINNIA

## ZINNIA—Continued

Per Pkt.

**Double Dahlia-flowered.**

The very latest in zinnias. Flowers of mammoth size and in form like a decorative dahlia. Mixed.... 20

**Haageana.** Double, orange; 1 ft. .... 10

**Double Giant Mixed.**... 10

**Curled and Crested.** Large, double flowers, with petals twisted, curled and crested into the most fantastic and graceful forms. Usual range of colors..... 10

## Hardy Perennials and Biennials

This class of flowers is coming into increased favor each year. The seed may be sown in the spring, or later in July or August. If sown at the latter time, it is well to sow in a shaded, moist place, or to keep the ground shaded and well watered until the seed appears.

## ALYSSUM

Per Pkt.

**Saxatile Compacta.** Grows about nine inches high, producing a mass of golden yellow flowers..... 10

## AQUILEGIA (Columbine)

Grows about two feet high, blooming in May or June.

**Mixed** ..... 10

## DELPHINIUM (Larkspur)

Per Pkt.

One of the finest perennials, growing four feet high, and lasting a long time in flower.

**Formosum.** Blue with white eye..... 10

## DIANTHUS (Pink)

**Carnation.** A magnificent class of popular flowers, very fragrant, and of rich and beautiful colors. Hardy perennial ..... 10

## GYPSOPHILIA (Baby's Breath)

Delicate, mistlike flowers. Fine for bouquets. Grows two feet high.

**Paniculata.** White. Blooms the first year, if sown early ..... 10

## GAILLARDIA

One of the finest perennials, blooming the entire season. Flowers are large, daisy-like, in shades of yellow with brown centers.

**Mixed** ..... 10

## BELLIS PERENNIS (Double Daisy)

Fine for bordering. Set six inches apart.

**White** ..... 10

**Red** ..... 10

**Mixed** ..... 10



DOUBLE DAISY

## CANTERBURY BELLS

Large, bell-shaped flowers, blooming in July. Grows two feet high.

**Blue** ..... 10

**White** ..... 10

**Mixed** ..... 10



CANTERBURY BELLS

## COREOPSIS

**Lanceolata Grandiflora.** Has large showy bright yellow flowers—a hardy plant and produced in the greatest abundance from June till frost..... 10

## DIGITALIS (Foxglove)

This is a very ornamental biennial plant, almost three feet high. The racemes of thimble-shaped flowers are often two feet long.

**Gloxineiflora.** Mixed. Spotted flower..... 10

## MYOSOTES

## (Forget-Me-Not)

Low-growing plants, preferring moist, shady places. Most effective grown in masses.

**Victoria.** Dwarf, sky blue. 10

**Mixed** ..... 10



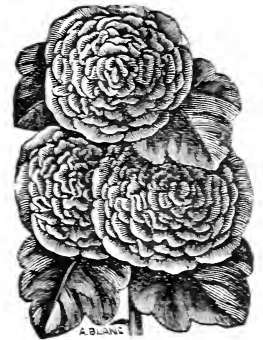
FORGET-ME-NOT

## HOLLYHOCK

Showy perennials, about four to five feet high.

**Double Mixed.** Extra choice ..... 10

**Single Mixed** ..... 10



HOLLYHOCK

## HONESTY

A hardy biennial, two feet high, flowering the second year in May and June. The flowers are succeeded by singular semi-transparent seed vessels that are quite ornamental and may be kept for a long time..... 10

**PERENNIAL PHLOX**

Per Pkt.

One of the most beautiful of the perennials, growing two to three feet high, with large heads of flowers..... 10

**PERENNIAL POPPY**

**Iceland.** Blooms the first year from seed. Colors range from white to orange..... 10

**Oriental.** Very large bright scarlet flowers. Fine for borders and amongst shrubbery..... 10

**POLYANTHUS**

Grows about one foot high, blooming in June and July. 10

**SHASTA DAISY**

A hardy perennial, lasting in bloom for a long time. Flowers are white, and from one to four inches across.. 10

**SWEET ROCKET**

An early flowering perennial, about eighteen inches high, with fragrant purple and white flowers..... 10



SWEET WILLIAM

**SWEET WILLIAM**

Per Pkt.

One of the most showy of the perennials, bearing large trusses of flowers.

**White** ..... 10

**Pink** ..... 10

**Crimson** ..... 10

**Mixed** ..... 10

## Vegetable Plants

**CELERY PLANTS**—Ready June 1st to 15th.

**Golden Self-Blanching**      **White Plume**  
**Boston Market**

**TOMATO PLANTS**—Ready May 15th to 20th.

**Earliana**      **Dwarf Champion**  
**Red Cross**      **John Baer**  
**Jewel**      **Perfection**  
**Early Avon**      **Bonny Best**

and other standard varieties.

One dozen in each box.

**CABBAGE PLANTS**

Early summer varieties. Ready May 15th to 20th.  
For winter crop. Ready June 15th to 20th.

**CAULIFLOWER PLANTS**

Ready May 15th to 20th.

**RHUBARB ROOTS AND ASPARAGUS ROOTS**

Ready in April.

## Bedding Plants

**GERANIUMS** in 3-inch and 4-inch pots.

**CANNAS** and **FUSCHIAS** in 4-inch pots.

**HELIOTROPE, CALENDULAS** and **LOBELIAS** in 3-inch pots.

Potted plants and plants in baskets and boxes cannot be sent by mail.

## Flower Seedlings

**Aster**  
**Marigold**

**Pinks**  
**Phlox**

**Petunia**  
**Snapdragon**

**Stock**  
**Zinnia**

**Pansies (choice strain)**  
**Verbenas**

## Hardy Plants and Shrubs

These can be supplied on short notice. The demand for hardy perennials is continually on the increase, as they bloom year after year with only slight care. To insure the plants reaching the purchaser in the best possible condition they will be sent direct from the nurseries. The following is a partial list of what we can supply:

**HARDY PERENNIALS**

**Asters**      **Canterbury Bells**      **Foxglove**      **Hollyhock**      **Oriental Poppies**      **Sweet William**  
**Baby's Breath**      **Columbine**      **Gaillardia**      **Larkspur**      **Phlox**

Price, 30 cents each.

Peonies, price, 50 cents to \$2.00 each.

**HEDGE PLANTS**

Japanese Barberry, 10 to 12 inches, \$18.00 per 100; 12 to 15 inches, \$22.00 per 100.

**ORNAMENTAL SHRUBS**

Weigelia .....	.75	Syringa .....	.60	Golden Leaved Elder .....	.60
Forsythia .....	.60	Spiraea .....	.60	Bush Roses .....	.75
Honeysuckle .....	.60	Lilacs .....	.60	Climbing Roses .....	.75
Hydrangea .....	.60	Bridal Wreath .....	.60		

**VINES AND CLIMBING SHRUBS**

Woodbine .....	.60	Clematis Paniculata .....	.60	Honeysuckle .....	.60
Boston Ivy .....	.60	Clematis Jackmanni .....	1.00	Wistaria .....	1.00
Dutchman's Pipe .....	1.50				



ESTABLISHED 1858

INCORPORATED 1896



# Kendall & Whitney

Federal and Temple Streets

Portland, Maine

## ORDER SHEET FOR SEEDS, ETC.

Date ..... 19.....

Name .....

Post Office..... (R. F. D.).....

Express Office (If different from Post Office) .....

Freight Station.....

State.....

Amount Enclosed

\$.....

Send Goods by

☐

YES

To avoid delay in filling the order, please let us know if we may substitute for any varieties which may be out of stock.

NO

☐

Quantity

NAMES OF ARTICLES ORDERED

PRICE

42 In making out your order, please give the price

Carried forward

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out and we will not be responsible for the crop.

[illegible]

## Summer-Flowering Bulbs

### GLADIOLUS

Plant in good garden soil, after the ground becomes warm in the spring, in full exposure to the sun. Set bulbs from 4 to 6 inches deep.

**America.** Soft pink. Per doz., 40c.; per 100, \$3.00.

**Baron Hulet.** Deep blue. Per doz., 85c.; per 100, \$6.50.

**Halley.** Salmon pink with creamy blotch. per doz., 50c.; per 100, \$3.50.

**Ida Van.** Salmon red. Per doz., 55c.; per 100, \$4.00.

**Mrs. Frank Pendleton.** Very large, salmon pink, brilliant carmine blotch on throat. Per doz., 80c.; per 100, \$6.00.

**Chicago White.** Large white. Per doz., 70c.; per 100, \$5.00.

**Schwaben.** Pure canary yellow. Per doz., 80c.; per 100, \$6.00.

**Flora.** Golden yellow, a strong grower. Per doz., 90c.; per 100, \$7.00.

**Herada.** Large mauve flowers, with deeper markings. Per doz., 80c.; per 100, \$6.00.

**Mrs. Watt.** Rich, deep cherry red. Per doz., 80c.; per 100, \$6.00.

**Wilbrink.** Delicate pink, very early. Per doz., 80c.; per 100, \$6.00.

**Fine Mixed.** Per doz., 85c.; per 100, \$2.50.

### CALADIUM ESCULENTUM

Eight to ten inches in circumference. Each, 10c.; per doz., \$1.00.

### MADEIRA VINE

Each, 5c.; per doz., 50c.

### GLOXINIAS

**Assorted Colors.** Each, 30c.; per doz., \$3.25.

### TUBEROSE

Large bulbs. Each, 8c.; per doz., 75c.; per 100, \$5.50.

### DAHLIAS

Selected for variety of color, form, size and perfection of bloom. All bulbs started, and ready for early flowering. Stock for shipment, May 15th to June 1st. Each, 20c.; per doz., \$2.00.

### Choice Named Varieties

Price on application.

Caladium and dahlias ordered by mail are subject to an extra charge of ten cents per dozen for postage. All other bulbs ordered by mail are subject to an extra charge of five cents per dozen for postage.



TULIP

## Dutch Bulbs For Winter and Spring Blooming

These bulbs are imported directly from Holland growers, from whom we have had bulbs for more than fifteen years, so we are assured of the quality. Our assortment will consist of hyacinths, tulips, narcissus and crocuses, and will be ready for shipment about October 1st. Send for our bulb list giving directions for growing and prices. No class of plants is easier to grow successfully than these bulbs, so do not fail to enjoy their flowers during the winter and spring months.

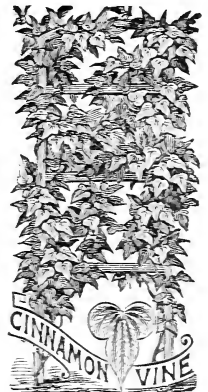
## Genuine Chinese Cinnamon Vine

Most Beautiful, Most Fragrant and Easiest  
Grown of All Climbers. Once Planted  
Will Grow a Lifetime

Perfectly hardy, grows in sun or shade, wet or dry, indoors or out. No insect or blight ever troubles.

For windows, plant two on each side. For porches, plant eight to twelve inches apart, covering two inches and furnish twine support for the vines. Read this testimonial from Prof. W. H. Morse, Agricultural Chemist, Hartford, Conn.: "Your cinnamon vines were the marvel of the city. They were more wonderful, more pleasing and more fascinating than ever. Their sweet perfume captivates every heart."

Price, 10 cents each, \$1.00 per doz., postpaid.



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



## Varieties of Particular Merit

### Sweepstakes Pedigree Seed Corn

(Copyright 1915)

Has made and will continue to make **lasting friends** with every **dairyman** who wants to provide the very best **food** that he can place before his stock; also every **farmer and stock raiser** who wants to grow the very best **beef, mutton and pork** at the least possible cost, as he can produce 50 per cent. **more food value per acre from SWEEPSTAKES PEDIGREE SEED CORN** than from any other known kind or brand.

As an ensilage corn it has repeatedly yielded from 15 to 25 tons of ensilage to the acre. Nearly every stalk has two large ears, which add much to the value of the ensilage. Since we have been selling this corn our sales have increased year by year, which proves that those who want the best feel sure that they have found it in Sweepstakes.

All of our Sweepstakes corn has been screened through a  $\frac{3}{8}$ -inch screen, which insures the user all large, vigorous kernels, which will germinate 90 per cent. or better.

To obtain the best results the corn should be planted in rows 3 feet apart, and 1 kernel in a hill, not nearer than 10 inches, which will require 12 quarts to the acre.

### SPECIAL OFFER

In order that more farmers may learn that this corn is superior to any other ensilage corn, we are making a special offer. To any customers sending in an order for 5 bushels, we will send  $\frac{1}{2}$  bushel free of charge. Also, upon an order for 10 bushels we will send 1 bushel free of charge. By combining your neighbor's order with yours you can easily make up an order for these amounts. By doing this you will be doing them a favor, as well as getting your seed free.

**You can rest assured of the seed we sell you.** It is bred and grown by The Introdurers and Owners of the Copyright Brand; sold only under copyright tag and sealed with a lead seal, both attached to their printed and copyright sacks. **Buy none other.**

We advise you to **place your order immediately.** 2 bushel sacks, **XXX GRADE**,  $\frac{3}{8}$ -inch screen, 90 per cent. germination or better, 1600 kernels or less to the quart, at \$12.00 per sack. Sold under the originator's guarantee of satisfaction.

### TOPEPO (Tomato Pepper)

#### A Cross between the Stone Tomato and Bell Pepper

The seed in this packet is of the **ORIGINAL STRAIN OF J. F. O'KEEFE.** The TOPEPO is superior to the pepper for stuffing, baking, salads, gravies, etc., and is also used as a table decoration. Fruit shaped like tomato—large in size, beautiful in colors—red, yellow, green, and orange.

Firm, thick walls giving exceptional keeping qualities.

Plant seed in hot beds, covering with very little soil; after sixty days and danger of frost is over, transplant in rich soil about three to four feet apart; the plants bear heavily and for a comparatively long season, although rather slow to start.

It is advisable to use well rotted manure after plants have been transplanted and have been growing about thirty days; this will develop and produce large Topepos.

**Pick when Red or Yellow Colors Predominate. Price per Pkt., 25c.**

**EARLY WONDER BEET** This variety combines all that is desired in a beet for early market or the home garden. It is one of the earliest beets, and on this account is excellent for late fall sowing. The almost perfect shape, deep red color, small top and fine flavor make it a ready seller, and a beet that, once tried, will be planted a second time.

**Price: Pkg., 10c.; oz., 20c.;  $\frac{1}{4}$  lb., 50c.; lb., \$2.00**



## VARIETIES OF PARTICULAR MERIT--Continued

**SUTTON'S PRIZE WINNER MANGEL** Sutton's Prize Winner is the heaviest cropping Yellow Globe Mangel in existence. The massive roots are of a deep globe shape, very clean in outline, with a single tap-root, and carry a comparatively small amount of foliage. This variety may be relied upon to yield a profitable return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. Analysis has shown that the roots contain as much as 6.53 per cent. of sugar and 12.21 per cent. of dry matter, and as the weight of the crop far exceeds that of other varieties it will be seen that Sutton's Prize Winner produces the greatest amount of dry (or feeding) matter per acre of any Mangel. A yield of over forty-eight tons per acre has been obtained from this Mangel.

Price: Pkg., 10c.; oz., 20c.;  $\frac{1}{4}$  lb., 50c.; lb., \$1.50

**DANISH BALL HEAD CABBAGE** Since the Danish Ball Head Cabbage was introduced it has become the most popular cabbage to raise for winter use. The head is of good size and very solid. This particular strain is raised for us by one of the best growers at Cape Elizabeth. Nothing but the most perfect heads are used for seed purposes, and we feel that we can highly recommend this seed to those who wish the very best.

Price: Pkg., 10c.; oz., 60c.;  $\frac{1}{4}$  lb., \$2.25

**EXTRA EARLY COPENHAGEN MARKET CABBAGE** This is an improved strain of this popular variety, having all of its good points, and in addition is five days earlier.

Price: Pkg., 10c.; oz., 60c.;  $\frac{1}{4}$  lb., \$2.00

**GOLDEN ACRE CABBAGE** The earliest round-headed variety. Plants small, compact, with few outer leaves. Heads round, solid and very uniform. Those who planted it last season say it is the best yet.

Price: Pkg., 15c.; oz., \$2.00

**DELUE'S GOLDEN GIANT SWEET CORN** Ears are much longer than the Golden Bantam, fourteen to sixteen rows, and the yield per acre is considerably more. Being equally early, of deeper color, and of excellent quality, it is highly recommended both for market gardeners and private gardens.

Price: Pkg., 10c.;  $\frac{1}{2}$  lb., 25c.; lb., 40c.

**EARLY HONEYSUCKLE CORN** This is considered by the growers to be the earliest variety of sweet corn on the market. It is similar to the Mayflower corn, which has been so well liked, but because of being earlier is taking the place of that variety. On account of its earliness and fine quality it is a splendid corn to raise for the early market and for the home garden.

Price: Pkg., 10c.;  $\frac{1}{2}$  lb., 25c.; 1 lb., 40c.; 12 $\frac{1}{2}$  lbs., \$3.75

**EARLY FORTUNE CUCUMBER** We recommend the Early Fortune as one of the most desirable cucumbers on the market. The quality is excellent, and the flesh is thick, with few seeds. The dark green color and cylinder shape make it most attractive.

Price: Pkg., 10c.; oz., 20c.;  $\frac{1}{4}$  lb., 60c.; lb., \$2.00

**WHITE WONDER CUCUMBER** This is a medium-sized variety of good quality. The point that distinguishes it from other cucumbers is the color, which is white, making it very attractive.

Price: Pkg., 10c.; oz., 20c.;  $\frac{1}{4}$  lb., 60c.; lb., \$2.00

**ARLINGTON THICK-LEAVED DANDELION** A variety much esteemed by market gardeners because of the thickness of the leaf and dark green color.

Price: Pkg., 15c.; oz., \$1.50

**CRISP AS ICE LETTUCE** A mid-season variety, forming medium-sized heads, which are very crisp and of fine flavor. The leaves are crimped and curled, the outside leaves dark green and bronze, and the inner part creamy yellow.

Price: Pkg., 10c.; oz., 30c.

**NEW YORK, OR WONDERFUL LETTUCE** One of the best summer lettuces, as it is slow to run to seed and is a sure header under trying conditions. The outer leaves are green, the inner ones blanch to a creamy white, and are crisp and tender. Well worth a trial.

Price: Pkg., 10c.; oz., 30c.

## VARIETIES OF PARTICULAR MERIT--Continued

### BENDER'S SURPRISE MUSK MELON

A new variety which has become very popular in the East. It is medium early, of large size, and of superior keeping qualities. Color of flesh, salmon.

Price: Pkg., 10c.; oz., 15c.;  $\frac{1}{4}$  lb., 50c.

### PEERLESS, OR ICE CREAM MELON

This is one of the best for growing in the North on account of its earliness. It is of medium size, rind thin, color light green, mottled, flesh bright scarlet, and very sweet.

Price: Pkg., 10c.; oz., 15c.;  $\frac{1}{4}$  lb., 50c.

### BLUE BANTAM PEA

To those who wish a large-podded early pea which does not grow as tall as the Gradus we recommend the Blue Bantam. The vines are about eighteen inches high, make a vigorous growth, and the pods are well filled, averaging nine or ten peas to the pod, while the quality is the best.

Price: 1 lb., 45c.; 2 lbs., 85c.; 14 lbs., \$4.75

### CARTER'S EARLY EIGHT WEEKS PEA

This is a very hardy, vigorous growing dwarf variety. It produces a rank foliage and is a splendid cropper. It more nearly fills the requirements of a large-podded, smooth pea than any other variety yet introduced. It is extra early, being several days in advance of all the early wrinkled varieties. It is of good quality, being far superior to the usual run of extra early sorts. The pod is of attractive shape and is filled with good-sized peas. For private garden use it is of exceptional merit.

Price: 1 lb., 45c.; 2 lbs., 85c.; 14 lbs., \$4.75

### JAPANESE ONION SETS (Yellow)

To those who have had difficulty in raising onions from seed, or who wish early onions, we would recommend their trying some of these new sets. For abundance of yield they surpass any other variety of sets and are also good keepers.

Price: Lb., 35c.; pk., \$2.00

### EARLY AVON TOMATO

The fruit of this new extra early variety is round, smooth, deep scarlet in color, and of good size for so early a tomato. It is as early as the Earliana, and will yield more and better fruit.

Price: Pkg., 10c.; oz., \$1.00

### SUTTON'S MAGNUM BONUM SWEDE TURNIP

Is without doubt the finest type of purple-top Swede turnip that can be grown for general purposes. Its feeding value is high, the roots containing 12.5% dry matter, and the yield per acre is very heavy.

Price: Pkg., 5c.; oz., 15c.;  $\frac{1}{4}$  lb., 50c.; lb., \$1.50

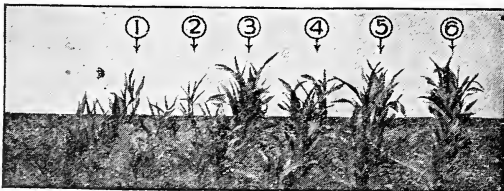
## Du Pont Semesan

### The NEW Mercuric Disinfectant

Du Pont Semesan is the first seed, plant and soil disinfectant that can be applied in either dust or liquid form. Extensive seed tests show that Semesan will successfully prevent or control the majority of externally and many internally borne diseases of seeds without in the least impairing their vitality. It is also effective in curing a number of common diseases that attack plants and infest the soil.



Controls seed diseases, quickens germination, invigorates seedling growth, produces sturdier plants, increases crop yields.



**"Brown Patch."** Semesan prevents and cures "Brown Patch," a disease of grasses that destroys the turf of golf greens, grass tennis courts, parks and estates.

**"Damping-Off."** Seedlings grown from Semesan-treated seeds are more resistant to the costly "damping-off" fungi which so severely attack both seedlings and cuttings.

**Sugar Corn Test.** Illustration shows plants in rows Nos. 3, 4, 5 and 6 grown from Semesan-treated seed.

Prices—2 oz., 50c.; 4 oz., \$1.00; 8 oz., \$1.60; 1 lb., \$2.75; 5 lbs., \$13.00; 25 lbs., \$62.50; 100 lbs., \$235.00

SEMESAN BEL: Prepared especially for Potatoes. Prices: 1 lb., \$1.75; 5 lbs., \$8.00; 25 lbs., \$37.00

SEMESAN JR.: Prepared especially for Corn. Prices: 1 lb., \$1.75; 5 lbs., \$8.00; 25 lbs., \$37.00

### COST OF SEED TREATMENTS WITH SEMESAN

The cost of treatment with Du Pont Semesan is insignificant, especially in contrast with the results it produces. One pound of Semesan will treat 240 pounds of the average vegetable seed by the dust method, or 960 pounds if liquid applications are employed, which means only from  $\frac{1}{4}$  cent to 1 cent per pound of seed.

## Larger Crops in Field and Garden

if you use

Registered in the  
United States Dec. 6th,  
1898.  
29 YEARS AGO.



Awarded Gold Medal  
World's Fair — St. Louis  
1904.  
23 YEARS AGO.

Alfalfa, clovers, soybeans, vetches, peas, beans, cowpeas, peanuts and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

## A Great Price Reduction

### NITRAGIN Costs Less

Nitragin now comes in Bushel sizes instead of acre sizes. This means that it costs you less per acre than inferior imitations. If you sow 12 pounds of seed to the acre, it will only cost you 20 cents for your Nitragin. It means that

### Your Dollar Goes Further with NITRAGIN

Nitragin is an old, reliable inoculator. At the low price of 20 to 23 cents per acre you cannot afford to sow legumes without it. Nitragin is put up in the modern ventilated package; in a rich, soil-like packing medium. The contents are always fresh, living bacteria to feed your plants. Easy to use.

### Prices for Field Nitragin

1/4 bu. size for 15 lbs. seed .....	\$0.40
1/2 bu. size for 30 lbs. seed .....	.60
1/2 bu. size for Soy Beans and Cow Peas.....	.40*
1 bu. size for 60 lbs. seed .....	1.00
1 bu. size for Soy Beans and Cow Peas.....	.70*
5 bu. size for 300 lbs. seed.....	4.75
5 bu. size for Soy Beans and Cow Peas.....	2.50*

\* These prices on Nitragin for Soy Beans and Cow Peas have been greatly reduced from former prices. Buy the economical 5 bu. size for 50c. per bushel of seed, treated.

When ordering, always state kind of seed you want to inoculate.

### NITRAGIN FOR GARDEN USE

Every garden needs Nitragin; garden size is for Peas, Sweet Peas, and Beans including Lima (3 in one Inoculant). Price, 20c.



## FARMOGERM

## A Seed and Soil Inoculant

That Increases Crop Production  
and Greatly Improves the Soil

Soil and crop experts agree that for best growth, and to put atmospheric nitrogen in the soil, it will pay all farmers to inoculate all legumes, even where they are at present successfully grown. The cost is trivial when compared with the profit it will bring you. Legumes are clovers, peas and beans, alfalfa, soy beans, vetches and other plants that grow their seeds in a pod. Their roots are the home of bacteria that draw fertility-building nitrogen from the air and store it in swellings on the roots, called nodules. These nodules not only feed nitrogen to the crop they are on, but rot away in the ground and supply valuable nitrogen to the soil for future bumper crops of corn, wheat, cotton, oats, fruits, etc.

### NEW SIZES

#### Small Seed Legume Varieties

(Alfalfa, Clovers, Sweet Clovers)

1/2 bushel size retails at.....	\$ .35
1/2 bushel size retails at.....	.60
1 bushel size retails at.....	1.00
2 1/2 bushels size retails at.....	2.25

### NEW PRICES

#### Large Seed Legume Varieties

1/2 bushel size retails at.....	\$ .35
1 bushel size retails at.....	.60
5 bushel size retails at.....	2.25

Garden size for garden peas, beans and sweet peas. Special composite culture, 25c.



Roots like this mean bigger yields—better soil.



## A General List of Vegetable Seeds

We forward seeds by **Mail, Express or Freight** as the purchaser may wish. When ordered by mail add postage for beans, corn and peas at the rate of eight cents per pound to catalog prices, and for larger shipments by mail, see Parcel Post rates on page 2 of cover.

### Valuable Table for Planting

Name of Vegetable.	When to Plant.		Depth to Plant.	Distance Apart.	Time of Maturity.
	Hotbed.	Open Ground.	Inches.	Inches.	
Asparagus		April or May	1	Transplant 12 x 36	3rd year from roots
Beans, Pole		May and June	2	Poles 36 x 36	August to frost
Beans, Dwarf		May to July	2	Thick drills, 24 apart	45 days
Beets		May to July	1	Thin to 5 x 15	50 "
Brussels Sprouts	March	May and June	1/2	Transplant 12 x 18	150 "
Cabbage, Early	March	April and May	1/2	Transplant 18 x 24	100 "
Cabbage, Late		June	1/2	Transplant 24 x 36	100 "
Carrot		May and June	1/2	Thin to 5 x 15	100 "
Cauliflower	April	May and June	1/2	Transplant 24 x 36	100 "
Celery	March	May	Barely cover	Transplant 2 x 4, in flats	170 "
Corn, Sweet		May to June	{ 1 Early 1 1/2 Late	{ Drills 10 x 30 Drills 12 x 48	60 to 90 days
Cress		May to July	1/4	Thin to 3 x 12	40 days
Cucumber	March	May to July	1/2	Hills 48 x 48	50 to 75 days
Dandelion		May	1/4	Thin to 6 x 12	Following spring
Egg Plant	April	June	1/2	Transplant 36 x 36	135 to 150 days
Endive		June to August	1/4	Transplant 12 x 12	45 days
Kale		June to August	1/2	Transplant 12 x 18	150 "
Kohl-Rabi		May to July	1/2	Thin to 6 x 18	110 "
Leek		April and May	1	Transplant 5 x 12	100 "
Lettuce	March	April to August	1/4	Transplant 12 x 12	25 to 60 days
Melons, Musk	April	May and June	1	Hills 60 x 60	120 days
Melons, Water		May and June	1	Hills 96 x 96	110 "
Onion		April and May	1/2	Thin to 5 x 18	100 to 150 days
Parsley		April and May	1/2	Thin to 6 x 12	45 days
Parsnips		April and May	1/2	Thin to 5 x 18	140 "
Peas		April to July	3	Thick rows, 24 apart	40 to 80 days
Pepper	March	June	1/2	Transplant 18 x 24	135 to 160 "
Potato		April to July	{ 2 Early 5 Late	12 x 36	90 to 130 "
Pumpkin		June	1/2	Hills 48 x 72	115 days
Radish	March	April to Sept	1/2	Thin to 2 x 12	25 to 45 days
Salsify		May	1/4	Thin to 4 x 18	Oct. through winter
Spinach		April to July	1	Thick rows, 12 or 15 apart	30 to 40 days
Squash		June	1	Hills 48 x 72	60 to 130 "
Tomato	March	June	1/4	Transplant 36 x 36	100 to 150 "
Turnip		April to August	1/2	Thin to 4 x 18	60 to 75 "

### Asparagus

Sow early in May, thinly, in rows one inch deep and two feet apart. The next season plant in drills, two inches deep and two feet apart, spreading the roots well out in ground thoroughly manured and trenched, at least two feet deep.

*One ounce will produce about 200 plants; 4 to 5 pounds to the acre.*

	Pkt.	Oz.	1 lb.
<b>Early Giant Argenteuil.</b> This variety has thus far been free from rust; valuable on account of earliness; produces an even growth, is of large size and superb flavor.	.10	.20	\$ .75
<b>Conover's Colossal.</b> Large and productive; a very desirable variety.....	.10	.20	.75
<b>Martha Washington.</b> A variety as nearly rust proof as possible. The plants are vigorous and produce thick shoots of a rich, dark green color, somewhat purple at the tips .....	.10	.30	1.00
<b>Asparagus Roots.</b> Two years old, per 100, \$1.50.			



## Beans---Dwarf or Bush

A succession of sowings can be made from the first week in May until August. Plant in drills about two inches deep, and from eighteen inches to two feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted; the plants should be about three inches apart. Frequent pickings insure a more prolonged bearing season. Avoid jerking the plant, as this frequently disturbs young feeding roots. Use the finger nails to sever the stems. Do not pick when bushes are wet, as this may cause blight and rust. For succession in the home garden plant thirty feet of row every other week up to August.

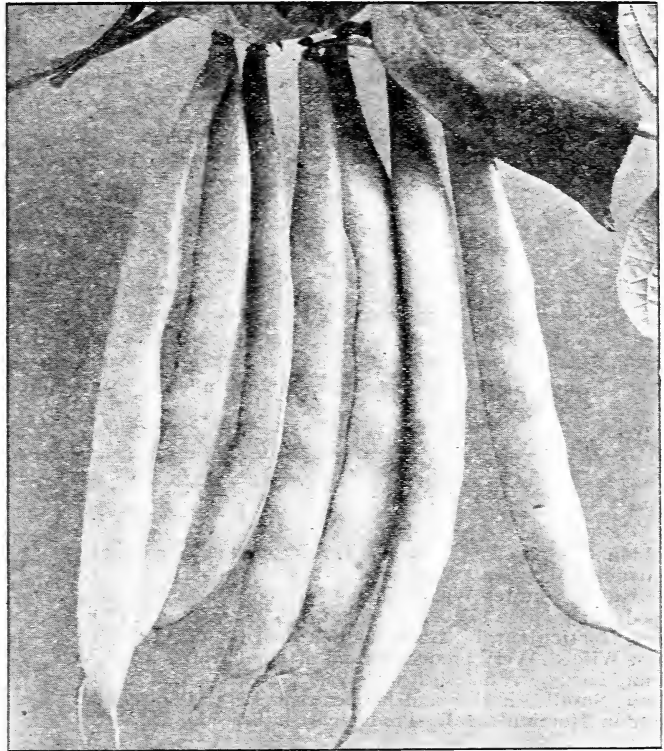
Two pounds are sufficient for 100 feet of drill; 90 pounds for one acre in drills.

Beans ordered by mail are subject to an extra charge of eight cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

### English Beans

**Broad Windsor.** Plant as early in the spring as the ground can be worked, from two to four inches apart, in drills from twenty-four to thirty inches apart. As soon as the plants are in full blossom, and the lower pods begin to set, pinch off the tops; this will insure the filling of the pods and hasten the maturity of the seed.

1 lb., .35; 2 lbs., .65



GREEN PODDED BUSH BEANS

### ABBREVIATIONS.

Ex. Ey.	Extra early.	F.	Flat.	G.	Green.	No S.	No string.
Ey.	Early.	T. F.	Thick-flat	Y.	Yellow.	V. L. S.	Very little string.
M. Ey.	Medium early.	S. R.	Semi-round	M. G.	Mottled green.	S.	String.
M.	Medium.	R.	Round.	M. Y.	Mottled Yellow.	S. S.	Strong string.
M. L.	Medium late.	S. B.	Saddle-back.				
L.	Late.						

Most flats become thick-flat and most thick-flats become semi-round as they near maturity.

Variety.	Description.				Price.		
					1 lb.	2 lbs.	8 lbs.
Burpee's Bush Lima. For shell bean only.....	L.	F.	G.	S.	.25	.40	
Burpee's Stringless Green Pod. Extra fine quality.....	Ex. Ey.	R.	G.	No S.	.35	.60	\$2.00
Bountiful. Hardy.....	Ey.	T. F.	G.	V. L. S.	.35	.60	2.00
Full Measure. Handsome smooth pod.....	Ey.	R.	G.	No S.	.35	.60	2.00
Dwarf Horticultural. Good quality, stringless.....	Ey.	T. F.	M. G.	No S.	.35	.60	2.00
Low's Champion. One of the best, either string or shell.....	Ey.	T. F.	G.	No S.	.35	.60	2.00
Long Yellow Six Weeks.....	Ex.	T. F.	G.	V. L. S.	.35	.60	2.00
Improved Refugee. Fine quality, prolific, fine for canning.....	M. L.	R.	G.	No S.	.35	.60	2.00
Brittle Wax. Fine, rather delicate.....	Ey.	R.	Y.	No S.	.35	.60	2.00
Black Wax. Superior quality, prolific.....	Ey.	R.	Y.	No S.	.35	.60	2.00
Currie's Rust-proof Wax. Tender and good quality.....	Ey.	F.	Y.	No S.	.35	.60	2.00
Golden Wax, Improved.....	Ey.	T. F.	Y.	No S.	.35	.60	2.00
Golden Wax, Keeney's Rustless. Superior quality, almost rustless.....	Ey.	T. F.	Y.	No S.	.35	.60	2.00
Sure Crop Stringless Wax. Extra quality, stands wet weather well.....	Ey.	T. F.	G.	No S.	.35	.60	2.00



## BEANS—Continued

## Field Varieties

Variety.	Description.				Price.		
					1 lb.	2 lbs	8 lbs.
Kidney, Red. Excellent as shell beans, or for baking....	M. L.	F.	G.	S. S.	.25	.45	
Snowflake Pea. Early and productive; for baking.....	Ey.	R.	G.	S. S.	.25	.45	
Yellow Eye. (State of Maine.) An improved strain.....	Ey.	F.	G.	S. S.	.25	.45	

## Beans---Pole or Running

The planting of the various sorts of pole beans should be delayed a week or more after the first planting of the early dwarf sorts. They succeed best in sandy loam, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep.

*Two pounds will plant 150 hills; 20 to 24 pounds to the acre.*

Variety.	Description.				Price.		
					1 lb.	2 lbs.	8 lbs.
Golden Cluster Wax. Good either as a shell or snap bean	Ey.	F.	Y.	S.	.35	.60	\$2.25
Kentucky Wonder. Very large pods of fine quality.....	Ey.	R.	G.	V. L. S.	.35	.60	2.25
Kentucky Wonder Wax. Similar to above with yellow pods. (See page 17).....	Ey.	R.	Y.	V. L. S.	.40	.75	2.75
King Horticultural. Good snap or shell bean.....	Ey.	T. F.	G.	V. L. S.	.35	.60	2.25
Lazy Wife's. Very productive and of fine flavor.....	M. L.	F.	G.	No S.	.35	.60	2.25
Lima, Large. A fine shell variety.....	L.	F.	G.	S.	.40	.75	2.75
Lima, Small. Earlier and harder than Large Lima.....	L.	F.	G.	V. L. S.	.40	.75	2.75
London Horticultural. Productive; either snap or shell bean.....	M. L.	T. F.	G.	V. L. S.	.35	.60	2.25
Red Cranberry. Great favorite; pods large and tender.....	Ey.	R.	G.	V. L. S.	.40	.75	2.75

ALL BEANS—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA

## Beet

The best results are obtained on a deep, rich, sandy loam. For early use sow as soon as the ground will admit, in drills fourteen inches apart, and thin to four inches; for the main crop, sow the first week in May, and for winter use as late as June. The soil should be deeply manured and well cultivated. In lifting and storing the roots, care must be taken that they are not bruised.

*One ounce to 50 feet of drill; 6 pounds to the acre.*

	Pkt.	Oz.	¼ lb.	Lb.
Crosby's Egyptian. As early as the Egyptian, shape more round, flesh sweet and tender .....	.10	.20	.60	\$1.50
DETROIT DARK RED. Similar in shape to the Dwing's, of dark red color, with small tops. A favorite with market gardeners .....	.10	.20	.60	1.50
Dewing's Blood Turnip. Of fine form and flavor, blood red. A desirable variety. ....	.10	.20	.50	1.25
Dirigo Extra Early. A rich, blood-red beet of fine grain and flavor, earlier than the Egyptian or the Eclipse.....	.10	.20	.50	1.25
Early Wonder. A popular variety among market gardeners. It matures very rapidly and is so uniform in growth that the crop can be lifted practically at one time .....	.10	.20	.60	2.00
Eclipse. This variety is about as early as the Egyptian, but larger and of finer quality; color, dark crimson.....	.10	.20	.50	1.25
Edmand's Early Turnip. A variety of handsome round shape. The skin is deep blood red in color, the flesh very dark and exceedingly sweet and tender in quality .....	.10	.20	.50	1.25
Swiss Chard (Lucullus). The leaves of Swiss chard are used as greens, cooked in the same manner as spinach, and the large ribs are prepared like asparagus, in which manner they are delicious. The "Lucullus" is the largest and the best variety of Swiss chard.....	.10	.20	.50	1.25

BEET—Continued

## Mangel-Wurzel and Sugar Beets

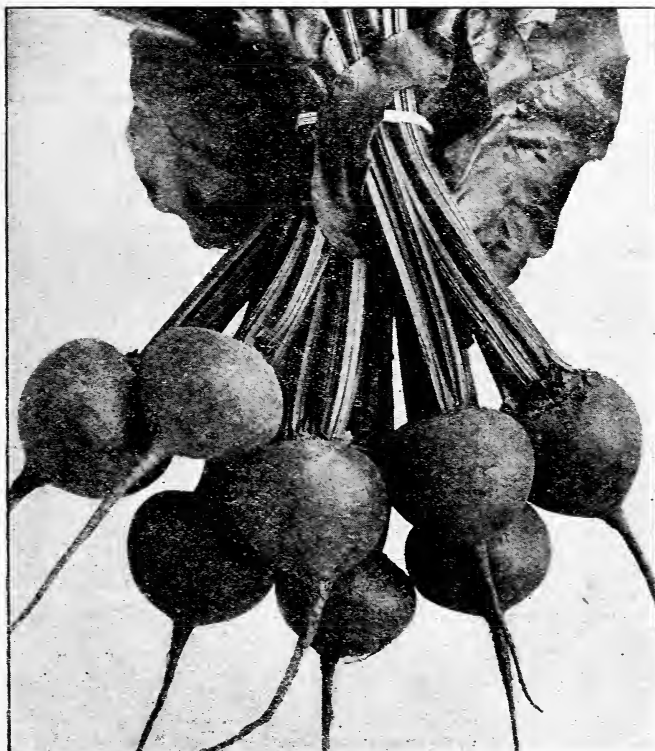
These beets, which have for a long time been grown abroad by stock raisers and dairymen, can be used to advantage in place of some of the more expensive mill feeds, and should be planted more extensively than they are. For poultry they furnish a valuable winter feed, much relished by the hens. From ten to fifteen tons can be raised on one acre.

*Sow in May or June—5 pounds per acre.*

<b>Allen's Mammoth Long Red Mangel-Wurzel.</b> A variety producing roots of mammoth size.....	Pkt.	$\frac{1}{4}$ lb.	Lb.
	.10	.30	\$ .75
<b>Golden Tankard Mangel-Wurzel.</b> Bright yellow; very productive .....	.10	.30	.75
<b>Sludstrup Mangel-Wurzel.</b> A Danish variety, richer in food value than other sorts. Roots are large, heavy and easy to harvest .....	.10	.30	.75
<b>Sutton's Prize Winner Mangel-Wurzel.</b> Considered to be the very best of the yellow Mangels. The massive roots are of a deep globe shape, very clean in outline, with a single taproot, and carry a comparatively small amount of foliage. This variety may be relied upon to yield a profitable return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. (See page 18) .....	.10	.50	1.50
<b>Lane's Imperial Sugar.</b> A greatly improved variety of the White French Sugar .....	.10	.30	1.00



Allen's Mammoth Long Red Mangel-Wurzel



DETROIT DARK RED BEET

## Broccoli

Broccoli is nearly allied to the cauliflower, and may be regarded as a variety of that delicious vegetable. It is hardy and sure to head, but inferior in flavor. It succeeds best in deep, rich, moist soil and in cool weather. Seeds should be sown at the same time and plants receive the same general culture as cabbage.

*One ounce of seed will produce about 2,000 plants.*

<b>Purple Cape.</b> Heads greenish purple; medium size and compact .....	Pkt.	Oz.
	.10	.60

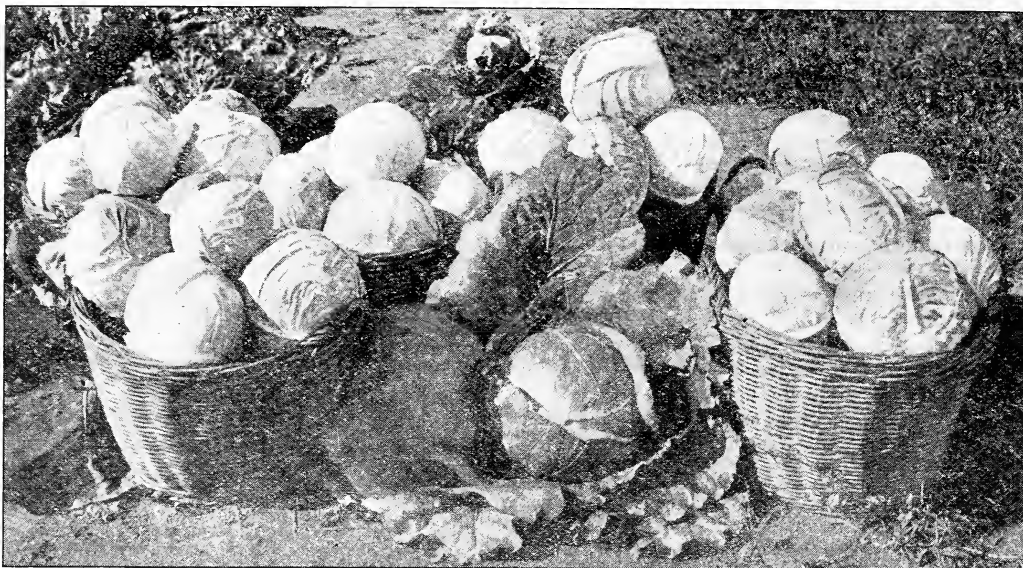
## Brussels Sprouts

A species of the cabbage family, producing along the stem small sprouts like little cabbages. Grown in the same manner as winter cabbage.

*One ounce of seed will produce about 2,500 plants.*

<b>Improved Long Island.</b> A variety of excellent quality ..	Pkt.	Oz.	$\frac{1}{4}$ lb.
	.10	.50	\$1.50

## Cabbage



The cabbage is one of the most important vegetables, and some of its varieties are universally cultivated. The ground must be highly manured, deeply dug or plowed, and thoroughly worked, to insure good, full-sized heads. A heavy, moist and fresh loam is the most suitable. The early sorts should be sown very early in the spring in hotbeds, or later in the open ground. Eighteen inches by three feet apart is the common distance.

*One ounce will produce about 3,000 plants; 4 to 5 ounces to the acre.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.
All Seasons. Larger than Henderson's Early Summer, nearly as early; very solid and sure heading .....	.10	.35	\$1.25
<b>COPENHAGEN MARKET.</b> One of the best large, round head, early cabbages in cultivation, the type being thoroughly fixed and nearly all the heads maturing at the same time. The plant is short-stemmed; heads, set near the ground, are very solid, with a small core, and of fine quality. One of the very best early cabbages for market gardeners.....	.10	.40	1.50
Danish Ball Head. (Imported.) Heads round and solid. A good winter variety.	.10	.40	1.50
<b>DANISH BALL HEAD.</b> (Cape Elizabeth grown.) A valuable, round, solid winter variety. Is a long keeper, and profitable for shipping, keeping long after other sorts have gone. This particular strain is the result of years of selection, and is in great demand by those who appreciate the best. The slight increase in price over the regular seed is more than offset by the increased yield.....	.10	.60	2.25
Earliest of All. The earliest round-headed variety. A splendid variety for market gardeners .....	.15	2.00	
Early Jersey Wakefield. A standard early variety for home use or market. Heads somewhat pointed .....	.10	.35	1.25
Extra Early Copenhagen Market. An improvement on the Copenhagen Market, being equally good and earlier.....	.10	.60	2.00
Golden Acre. The earliest round-headed variety. (See specialties, page 18).....	.15	2.00	
Henderson's Early Summer. One of the earliest of large cabbages, coming in but a few days later than the Wakefield; heads of large size, very solid and compact .....	.10	.35	1.25
Improved American Savoy. Very sweet and tender; good-sized, firm heads; very reliable and much esteemed for family use.....	.10	.35	1.25
Mammoth Red Rock. Used almost exclusively for pickling .....	.10	.35	1.25
Pe-Tsai (Chinese Cabbage). Grows similar to Cos lettuce .....	.10	.35	1.25
Stone-Mason Drumhead. One of the best for a main crop .....	.10	.40	1.50

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Carrot

Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills, two to two and one-half feet apart, and for table use sow the smaller varieties in rows sixteen to eighteen inches apart. For early crops, cover one-half an inch deep and thin to three inches apart in the rows; for late, cover three-fourths of an inch deep and thin to four inches.

*One ounce to 100 feet of drill; 3 to 4 pounds to the acre.*

**Chantenay.** A choice variety, longer than the Scarlet Horn, and a little broader at the top . . . . .10 .20 .50 \$1.50

**Danver's Carrot. Bagley Strain.** This is a cylindrical shaped carrot, eight to ten inches in length, which grows wholly in the ground and is very attractive. Probably the heaviest yielding strain on the market . . . . .10 .25 .75 2.50

**Danver's Half Long.** In form it is midway between the Long Orange and Scarlet Horn. The root is of a rich, dark orange color and grows very smooth. Very productive and keeps well. . . . .10 .20 .50 1.50

**EARLY MARKET.** A thick, stump-rooted early variety of brilliant color, broad at the top, gradually getting smaller towards the root, which is blunt. An excellent market sort. . . . .10 .20 .50 1.50

**Feonia.** A Danish novelty of most attractive appearance and fine quality. . . . .10 .25

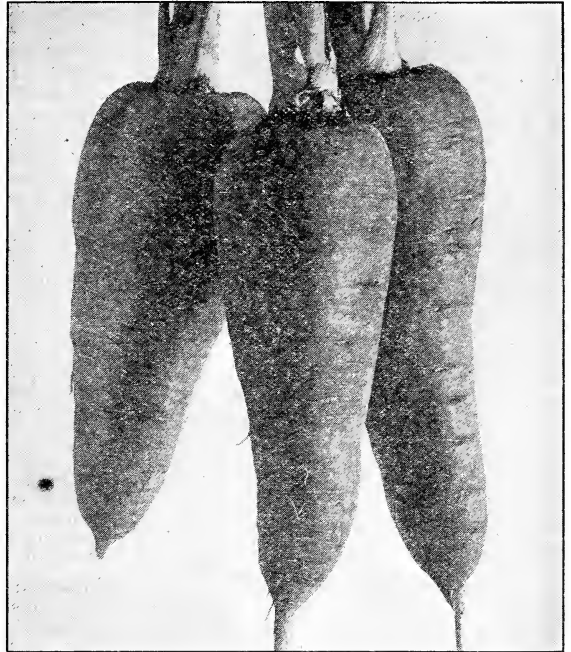
**Hutchinson.** An improved strain similar to the Danver's, but of larger size. It is of excellent quality and in great favor with market gardeners, who find it a ready seller on account of its attractive appearance . . . . .10 .25 .75 2.50

**Improved Long Orange.** The best late variety. Roots of large size, heavy cropper; an excellent keeper. . . . .10 .20 .50 1.50

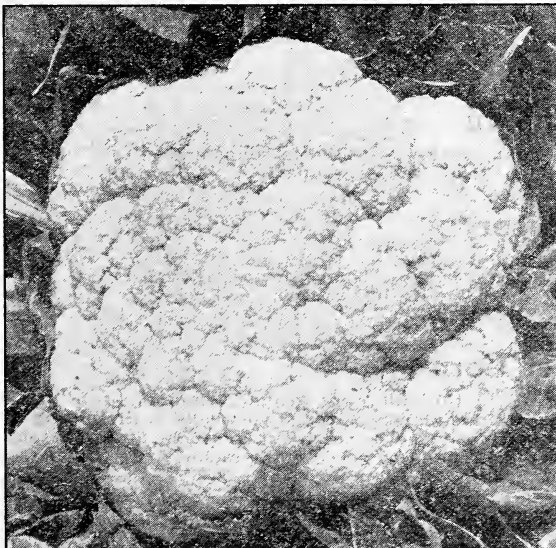
**Large White Belgian.** Large, long-rooted variety; valuable for feeding stock. . . . .10 .20 .50 1.50

**Nantes.** Early, roots almost cylindrical, very smooth, and grows about six inches long; the flesh is entirely red, very sweet, and almost entirely without a core. . . . .10 .20 .50 1.50

**Oxheart.** Very thick and short, fine grained and sweet . . . . .10 .20 .50 1.50



DANVER'S HALF LONG CARROT



GILT EDGE CAULIFLOWER

## Cauliflower

Any soil that will grow early cabbages will grow cauliflower, as their requirements are almost similar, but as the product is more valuable, extra manuring and preparation of the soil will be well repaid. The seeds may be sown in the hotbed in March or April, and transplanted to open ground about the first of May.

*One ounce will produce about 2,500 plants.*

**Carter's Autumn Giant.** A large, late variety . . . . .10 \$1.00

**Extra Early Dwarf Erfurt.** The earliest variety; large, compact heads, of fine quality. . . . .15 2.50

**GILT EDGE.** Large, heavy sort. One of the best and surest of all the sorts now in cultivation. . . . .15 2.75

**Henderson's Early Snowball.** One of the best early sorts. Very reliable and grown largely for the market . . . . .15 2.50





GOLDEN SELF-BLANCHING CELERY

## Celery

To have celery early it should be sown in a hotbed, quite early in the spring, and when three inches high plant out in a well-prepared bed, which must be covered in frosty weather. For the principal crop sow early in the spring, very shallow in the seed bed, and when the plants are about six inches high, transplant them six inches apart into trenches for blanching. Dig the trenches four feet apart, a foot wide and ten inches deep. Fill in five or six inches of well-rotted manure, and mix thoroughly half a spade deep with the earth at the bottom. The tops of the plants should be shortened before they are set. Earth up to blanch three or four times during their growth, taking care that no earth falls in the center of the plant.

*One ounce of seed produces about 4,000 plants.*

	Pkt.	Oz.	$\frac{1}{2}$ lb.
<b>Boston Market.</b> A favorite variety, remarkable for its tender, crisp and succulent stems, and its peculiarly mild flavor; keeps well.....	.10	.50	\$1.50

<b>GOLDEN SELF-BLANCHING.</b> A fine solid variety of a beautiful waxy, golden color; very thick stalks of excellent flavor; growth close, compact and of medium height.....	.10	.50	1.50
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<b>Henderson's White Plume.</b> Crisp, solid, and possessing a sweet, nutty flavor; requires very little labor in blanching. Very early and handsome.....	.10	.50	1.50
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<b>Golden Plume, or Wonderful.</b> A large early variety of fine appearance and quality, easy to blanch, and a good keeper .....	.15	1.00	3.00
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<b>Winter Queen.</b> An excellent winter keeper, recommended especially to market gardeners. Grows a thick stalk and has a large heart. The color is creamy-white and very attractive .....	.10	.50	1.50
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<b>Soup Celery.</b> (Not for sowing.) Used for flavoring pickles, soup, etc.....	.05	.10	.30
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## Swiss Chard

Swiss chard is sometimes called Sea Kale beet. After once having used Swiss chard for greens we believe your garden will always have at least a row of it, for it is delicious. The leaves are used as greens, and served like spinach. The mid-ribs may be cooked like asparagus. Cuttings may be made all summer, as it can be cut down to the ground and new shoots will soon spring up and make fast growth.

<b>Lucullus.</b> Largest and best variety.....	Pkt.	Oz.	$\frac{1}{2}$ lb.	Lb.
	.10	.20	.50	\$1.25

## Chervil

<b>Curled Chervil.</b> An aromatic sweet herb. The young leaves are used in soups and salads. Sow thinly in May, in drills half an inch deep, one foot apart.....	Pkt.	Oz.	$\frac{1}{2}$ lb.
	.10	.25	.85

## Chicory

<b>Large Rooted.</b> Used to mix with or as a substitute for coffee. The roots are taken up, washed, cut in small pieces and carefully dried before being used. Cultivation same as the carrot.....	.10	.35	\$1.25
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## Sweet Corn

The sweet or sugar varieties, being liable to rot in the cold, wet ground, should not be planted before the middle of May, and for a succession continue planting every two weeks until July, in rich, well-manured ground, in hills three feet apart each way, covering about an inch, and thin out to three plants to a hill, or plant in rows four feet apart, and to stand eight inches apart in the rows.

*One pound to 125 hills; 20 pounds to the acre.*

*Corn ordered by mail is subject to an extra charge of eight cents per pounds for postage. For larger shipments by mail, see rates on page 2 of cover.*

## CORN—Continued

## Early Varieties

**"K. & W." EARLY HONEY-SUCKLE.** The earliest variety yet produced, being very tender and delicious. One of the best for early market.....

	Pkt.	$\frac{1}{2}$ lb.	1 lb.	12 $\frac{1}{2}$ lbs.
	.10	.25	.40	\$3.75

**WHIPPLE'S EARLY YELLOW.** A remarkable new yellow sweet corn of much merit. While the stalks grow 6 feet or more in height and the 14-rowed ears are 7 to 8 inches in length, this variety matures three days earlier than Golden Bantam. The kernels are broad, deep and excellent quality.....

	.10	.25	.40	3.75
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**Early Crosby.** An excellent early variety. The ears are five to six inches long and the grains are white, sweet and tender.....

	.10	.25	.40	3.75
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**Golden Bantam.** An early variety. The ears are medium size, but thickly set with delicious yellow kernels. The quality of this variety is superb, and it has become a general favorite sweet corn with all who have tried it. Golden Bantam has a flavor distinct from other sorts, and if you have never tried it in your garden you should plant it this year. Never mind if the color is yellow, the rich nut quality is there.....

	.10	.25	.40	3.75
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**Delue's Golden Giant.** Larger than Golden Bantam, equally early, and of fine quality. (See page 18) .....

	.10	.25	.40
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GOLDEN BANTAM SWEET CORN

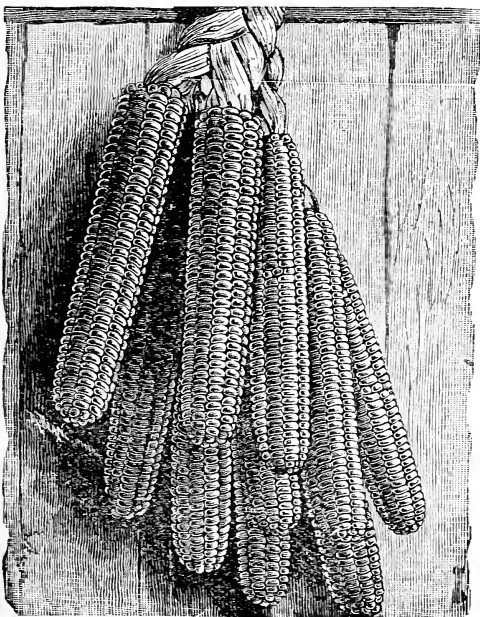
**Extra Early Dighton.** Believed to be the earliest sweet corn known. Stalks about four feet high, ears six to seven inches long, color white.....

	.10	.25	.40
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## Late Variety

**Stowell's Evergreen.** A late variety of excellent quality, remaining longer in the green state than any other kind....

	.10	.25	.40	\$3.75
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EARLY YELLOW FIELD CORN

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CORN—Continued

## Field and Ensilage Corn

(56 pounds to the bushel)

	1 lb.	2 lbs.	14 lbs.
<b>Early Yellow Canada.</b> The variety most widely grown in northern New England. An early eight-rowed flint corn, with handsome ears and comparatively small cobs, filled to the tips with large, broad kernels.....	.12	.20	\$1.25
<b>Early Sanford (Ensilage).</b> Very early; ears white; excellent for fodder and ensilage.			
<b>Eureka (Ensilage).</b> One of the tallest and best varieties of ensilage corn, producing a large amount of fodder to the acre.....			
<b>Improved Leaming (Ensilage).</b> An early, very productive variety. One of the best for ensilage; profitable as a green fodder.....			
<b>Red Cob (Ensilage).</b> A pure white corn. Is tender and juicy, has short joints, and grows to a great height, with an abundance of leaves.....			
<b>Sweepstakes (Ensilage).</b> We recommend this as the best ensilage corn we know of, because of its earliness and the great amount of ensilage which it produces, as high as twenty to twenty-five tons to the acre. When many varieties of ensilage corn are just beginning to form ears, Sweepstakes corn shows good-sized ears. As all of our Sweepstakes corn has been run through a three-eighths inch screen, you get only large, plump kernels which test ninety per cent. germination or better, and as twelve quarts of corn will plant an acre sufficiently thick to give the best results, the price of seeding an acre is not greatly more than if you used a cheaper corn, and the yield will be much larger. (See page 17).....			
	Price quoted on applica- tion.		

## Cress---Peppergrass

A well-known salad. Requires to be sown thickly and covered very slightly. Sow at frequent intervals to keep up a succession, as it soon runs to seed.

*One ounce will sow about 100 feet of drill.*

	Pkt.	Oz.
<b>Extra Curled.</b> Very fine; may be cut two or three times .....	.10	.20
<b>Water Cress.</b> A hardy perennial aquatic plant, growing in water along the margins of streams .....	.10	.60

## Cucumber

The cucumber is a tender annual, and therefore should not be planted or set out in the open air until there is a prospect of continued warm and pleasant weather. Cucumbers succeed best in warm, moist, rich, loamy ground. The hills should be four or five feet apart in each direction. When all danger from insects is past, leave but three or four of the strongest plants in the hill.

*One ounce to 50 hills; 2 pounds to the acre.*

	Pkt.	Oz.	½ lb.	Lb.
<b>Boston Pickling.</b> The finest variety to grow for pickles; yields large crops; short, straight and dark green.....	.10	.15	.50	\$1.50
<b>Cumberland.</b> A variety of the Improved White Spine type. Is a splendid table sort and excellent for pickling. Color, deep green with white tip; flesh firm; very crisp and tender.....	.10	.15	.50	1.50
<b>DAVIS PERFECT.</b> The cucumbers grow long and slim, sometimes measuring twelve inches in length. The color is a rich, dark, glossy green, which they hold until nearly ripe. Very tender and of fine flavor .....	.10	.20	.65	2.25
<b>CLARK'S SPECIAL.</b> An extra selected stock of dark green type, retains its color long after picking. Excellent market variety .....	.10	.20	.65	2.25



**CUCUMBER—Continued**

**Early Frame.** An early standard variety, about five inches long.

Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.15	.50	\$1.50

**Early Fortune.** A prime favorite with market growers because of its extra earliness and the fine deep green color which it holds long after picking. The shape is uniform and the quality all that could be desired.

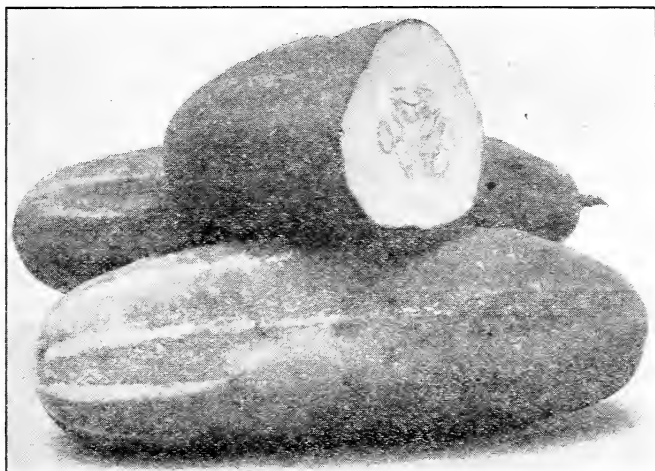
Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.20	.60	\$2.00

**Early Green Cluster.** Grows in clusters; early and productive.

Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.15	.50	\$1.50

**Early Russian.** The earliest variety.

Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.15	.50	\$1.50

**IMPROVED WHITE SPINE CUCUMBER**

<b>Improved White Spine.</b> Superior for table use; very productive; medium size, straight and well formed.....	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
	.10	.15	.50	\$1.50
<b>Japanese Climbing.</b> Quick, strong-growing vines, which may be trained upon a trellis or poles. Fruit from twelve to sixteen inches in length, skin dark green, flesh pure white, crisp and of fine flavor.....	.10	.20	.50	1.50
<b>Klondike.</b> A medium early, very good strain of White Spine. Fruit attractive and uniform .....	.10	.15	.50	1.50
<b>Lemon.</b> A distinct type; nearly round, with the yellow and green markings and smooth skin of the lemon, while flesh is exceedingly tender, crisp and sweet. ....	.10	.15	.50	1.50
<b>Long Green.</b> Long and crisp; a popular and reliable variety for pickling and table. ....	.10	.20	.60	2.00
<b>West India Gherkin.</b> Small, prickly variety; grown exclusively for pickling.....	.10	.20	.60	2.00
<b>White Wonder.</b> A new variety. Very handsome, with ivory white fruit.....	.10	.20	.60	2.00
<b>Wood's Early.</b> A very attractive dark green cucumber, combining earliness and productiveness .....	.10	.20	.65	2.25

**DANDELION****Dandelion**

A hardy perennial plant, with broad thick leaves affording one of the earliest as well as one of the most healthful of spring greens. Sow as early as the weather will permit, in good, well-enriched soil, in rows twelve inches apart, covering seed one-fourth of an inch deep, the earth firmly pressed over the seed.

One ounce to 150 feet of drill; 1 pound will sow an acre.

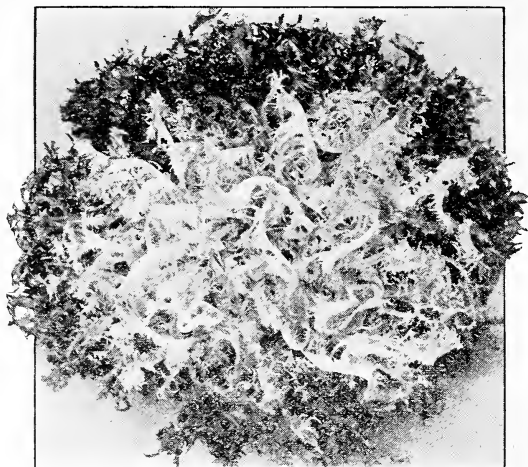
	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Arlington Thick-Leaved.</b> The thickness of the leaf and dark green color make it especially desirable .....	.15	\$1.50	
<b>Improved French Thick-Leaved.</b> One of the best varieties.....	.10	.80	\$3.00

**Egg Plant**

The egg plant will thrive well in any good garden soil. Sow in the hotbed and when two or three inches high prick out into pots, or rows two and one-half to three inches apart. When the weather will permit, transplant into good, rich soil, thirty inches apart each way.

One ounce will produce 1,000 plants.

	Pkt.	Oz.
<b>New York Improved Large Purple.</b> Most popular variety. The fruit is large, nearly round, dark purple and of excellent quality .....	.10	.65



ENDIVE

## Endive

For early use, sow in May, scattering the seed thinly in drills ten inches apart, covering it lightly, and for a succession, every two or three weeks until midsummer. The plants must be blanched before using, which is accomplished by gathering the large outer leaves to a point at the top and tying them together.

*One ounce will sow 150 feet of drill.*

	Pkt.	Oz.	¼ lb.
<b>Broad-Leaved Batavian.</b> (Esca- rolle.) Variety having wide, thick leaves, straight at the edges and curved toward the center. Color, dull green....	.10	.25	.90
<b>Green Curled.</b> Has very curly leaves, the outer edges being much indented and crested. An attractive plant and one of the best varieties.....	.10	.25	.90

## Kale (Borecole)

Sow early in May in a prepared bed, covering the seed lightly. Transplant in June, in rows three feet apart and two feet apart in row, and treat in the same manner as for cabbage. Kale is improved by a little frost, giving it a more delicate flavor.

*One ounce to 150 feet of drill.*

<b>Green Curled Scotch.</b> A round, dwarf variety, rarely exceeding eighteen inches in height, but spreading out under good cultivation to three feet in diameter.....	.10	.25	.85
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## Kohl-Rabi (Turnip-rooted Cabbage)

A vegetable intermediate between the cabbage and turnip. The edible part, the bulb, grows on a stalk a few inches above the ground. It is best cultivated by sowing the seeds in rows in May, June and July, according to latitude. Rows should be sixteen to eighteen inches apart and plants six inches apart in row.

*One ounce will sow about 200 feet of drill.*

<b>Early Purple.</b> Differing from the white only in color, being of a bluish purple....	.10	.25	.75
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## Leek

The leek is very hardy and easily cultivated. It succeeds best in a light, well-enriched soil. Sow as early in the spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

*One ounce of seed to 150 feet of drill.*

<b>London Broad Flag.</b> A large variety with broad leaves .....	.10	.30	.85
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## Lettuce

Lettuce thrives best in rich, moist ground. Sow the seeds in hotbeds in February or March, and transplant into a sheltered border with a southern exposure. For successive crops, sowing may be made in the open ground as early as spring opens and continue until July. Transplant or thin plants to stand eight to twelve inches apart.

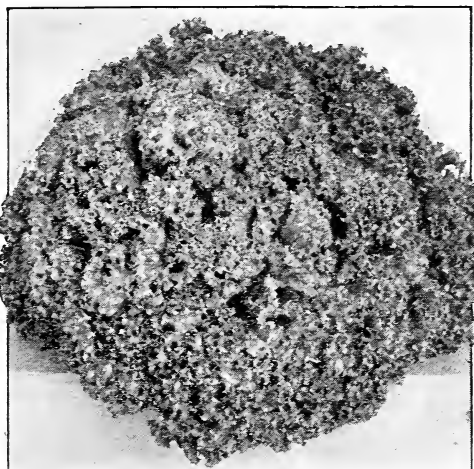
*One ounce to 125 feet of drill.*

## The Loose Leaf Varieties

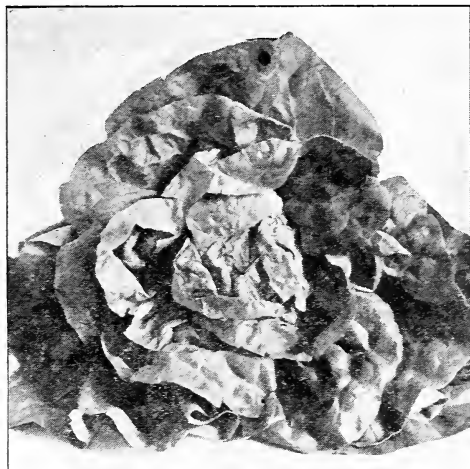
<b>Grand Rapids.</b> This sort is the best and most popular loose-leaved lettuce, being of quick growth. Fine for greenhouse forcing and hardy .....	.10	.30	\$1.00
<b>Boston Curled.</b> A variety of great beauty and of very superior quality. Leaves beautifully curled, attractive on table.....	.10	.30	1.00

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## LETTUCE—Continued



BOSTON CURLED LETTUCE



TENNISBALL LETTUCE

## The Heading Varieties

	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Big Boston.</b> Fine for forcing in cold frames and for planting in open ground.....	.10	.30	\$1.00
<b>Crisp as Ice.</b> Medium-sized heads, very crisp and of fine flavor. Outside leaves tinged with bronze, inside creamy yellow.....	.10	.30	1.00
<b>Hanson.</b> Heads very large, solid, tender, crisp and of fine flavor; color, beautiful green outside and white within.....	.10	.30	1.00
<b>Hittinger's Belmont Forcing.</b> Larger than the White-Seeded Tennisball, nearly as early and of excellent quality; a choice strain for forcing .....	.10	.30	1.00
<b>Iceberg.</b> A large-heading variety; crisp and brittle, and color light green, lightly tinged with brown on top of the head; leaves curled on the edges.....	.10	.30	1.00
<b>May King.</b> Very early, medium size and tender; heads light green, with center leaves tinged with brown and the hearts clear yellow .....	.10	.30	1.00
<b>Mignonette.</b> Small, compact, creamy-yellow heads, tinged outside with russet; of superior quality, sweet, crisp and tender, very early and hardy; excellent "all seasons" variety .....	.10	.30	1.00
<b>New York or Wonderful.</b> This is one of the best summer lettuces. It resists the hot weather, is very slow to run to seed, and is a sure header under the most trying conditions. The outer leaves are of a green color, the inner ones blanch to creamy-white; crisp, tender, delicious and sweet. The heads often measure fifteen inches .....	.10	.30	1.00
<b>Prize Head.</b> One of the very best varieties, making a loosely formed head. Color bright green tinged with brownish red; very curly and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. It is probably the most easily grown lettuce in cultivation.....	.10	.30	1.00
<b>Salamander.</b> A fine summer lettuce. Is slow to run to seed, and will stand the drought and heat better than other varieties.....	.10	.30	1.00
<b>Tennisball, Black-Seeded.</b> Popular for open-air culture; heads compact, crisp and tender .....	.10	.30	1.00

## Romaine Lettuce

<b>White Paris Cos (Romaine).</b> A sort with long, narrow, upright leaves; does not head, but when tied up blanches very easily.....	.10	.30	1.00
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## Martynia

A strong-growing, hardy annual, with curious-shaped seed-pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance and should be gathered when about half grown. Plant in May or June in rows two feet apart, making hills about a foot apart.

One ounce will plant 50 hills.

<b>Martynia Probosidea.</b> Best for pickling.....	.10	.40	\$1.25
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## Musk Melon

Melons thrive best in a moderately enriched, light soil. The hills should be six feet apart each way. After all danger of frost is past, plant twelve or fifteen seeds in each hill, and when well up thin out to three or four plants.

*One ounce to 60 hills; 2 to 3 pounds for an acre.*

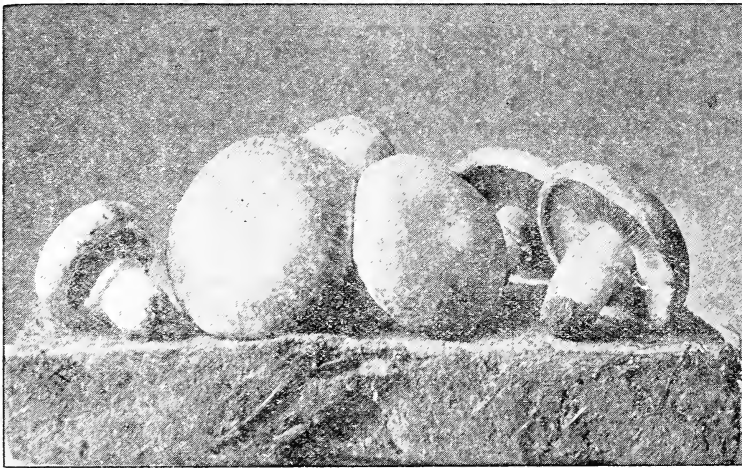
	Pkt..	Oz.	$\frac{1}{4}$ lb.
<b>Banana.</b> So called on account of its shape. Straw color; flesh a rich salmon.....	.10	.15	.50
<b>Bender's Surprise.</b> Very popular variety in the East. A very delicious, large, salmon fleshed melon with superior shipping and keeping qualities. Medium early.....	.10	.15	.50
<b>Emerald Gem.</b> Medium size; flesh rich salmon, of delicious flavor and superior quality; early and prolific.....	.10	.15	.50
<b>HONEY DEW.</b> The delicious, honey-like flavor of this new melon met with instantaneous public favor and created a sensation wherever used. The fruit is good size, weighing eight to ten pounds; light-colored, smooth skin; thick, light green flesh.	.10	.20	.75
<b>Large Round Yellow Cantaloupe.</b> Flesh reddish-orange, sweet and of good flavor; an early and productive variety.....	.10	.15	.50
<b>Montreal.</b> Large, round, netted; flesh thick and light green .....	.10	.15	.50
<b>Rocky Ford.</b> Flesh green; medium size; oval shaped .....	.10	.15	.50

## Water Melon

Plant in hills eight feet apart and cultivate same as musk melon.

*One ounce for 30 hills; 4 or 5 pounds to the acre.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Citron.</b> The standard variety for preserves.....	.10	.15	.35
<b>Cole's Early.</b> An extra good variety for growing in the Northern States, as it matures early. Large heart, flesh of fine texture and good flavor, rind thin.....	.10	.15	.50
<b>Mountain Sweet.</b> An old and reliable sort; flesh red .....	.10	.15	.35
<b>Peerless or Ice Cream.</b> Very early, of medium size and one of the best for growing in the North. A short oblong in form; rind thin, light green, mottled and finely veined with a darker shade; flesh bright scarlet and very sweet; seeds white.....	.10	.15	.35
<b>Phinney's Early.</b> Productive, early and finely flavored; flesh red .....	.10	.15	.35



## Mushroom Spawn

Mushrooms may be grown in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment; turn and mix it well every few days, and when well fermented it may be made into a bed, mixing it well together and beating or treading it firmly. Use a thermometer to thrust into the bed, and note the temperature. When the heat has partially subsided, leaving a temperature of 70° to 80°, put in the spawn, which may be inserted in pieces the size of a walnut, about two inches deep and six inches apart. After about

two weeks, cover with fresh soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean straw or hay about a foot thick. If the temperature is right, mushrooms will begin to come up in about six to eight weeks, and the bed will continue bearing for about a month. One pound of spawn is sufficient for a bed 2x6 feet.

**English Spawn** .....In bricks, per lb., 25 cts.; 6 lbs., \$1.25

*By mail, add 8 cts. per lb. for postage, and for larger shipments by mail, see rates on page 2 of cover.*

## Mustard

A pungent salad used with cress. The seed is used for flavoring pickles, etc. Sow in May thickly in rows and cut when two or three inches high.

*One ounce to 40 feet of drill.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Brown.</b> More pungent in flavor than the white.....	.10	.15	.40	\$1.25
<b>White London.</b> Mild flavor. Best for salads.....	.10	.15	.40	1.25

## Okra (Gumbo)

Sow about the middle of May, when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around plants to support them. Gather pods while young and tender. Excellent for soups, stews, etc., to which they impart a rich flavor.

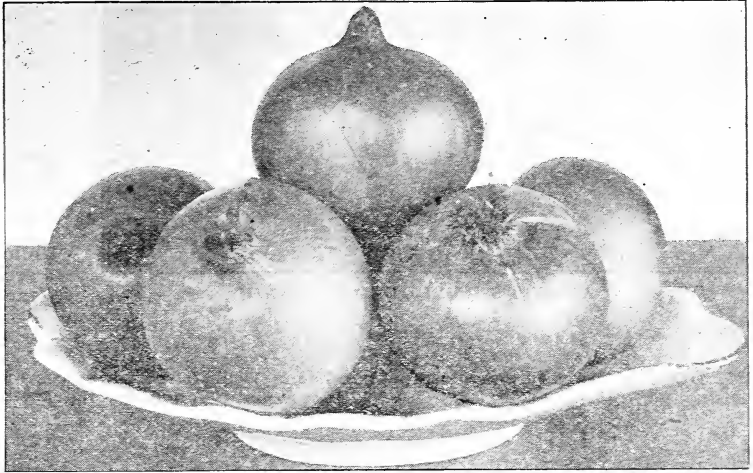
*One ounce will sow 40 feet of drill.*

**Improved Dwarf Green.** An early dwarf and prolific variety, with thick green pods. 

Pkt.	Oz.	$\frac{1}{4}$ lb.
.10	.15	.30

## Onion

A good crop is impossible unless the soil is very rich and kept clean. Use well-rotted manure freely, and get the crop in as soon as possible in the spring, no matter if the weather is cold and unpleasant. Sow in drills one foot apart and cover about one-third of an inch, treading or rolling after sowing, so that the hot, dry atmosphere may not dry up and destroy the sprouting seed. As soon as the plants can be seen in the rows give a shallow working, followed in a few days by another working as close to the plants as possible, and after this a thorough hand weeding. Cultivate, if possible, once a week, and remove by hand any weeds that appear. As soon as the tops die and fall the bulbs may be pulled and placed in small windrows, turning often. Cut off the tops half an inch from the bulbs and store in crates under cover in a uniform temperature a little above freezing.



YELLOW GLOBE DANVERS ONION

*One ounce to 100 feet of drill; 5 pounds to the acre.*

<b>Extra Early Red Globe.</b> Ten days earlier than the Wethersfield, of medium size and deep, rich color; an abundant producer and of good form and flavor, keeping well.	Pkt.	Oz.	$\frac{1}{4}$ lb.
	.10	.40	\$1.25
<b>YELLOW GLOBE DANVERS.</b> Extra choice seed, grown from bulbs especially and carefully selected as to shape; the most popular of all the yellow onions for market and home use. A heavy cropper, good keeper, and of fine, mild flavor. A profitable variety for market gardeners.	.10	.40	1.25
<b>Large Red Wethersfield.</b> Large size, productive and a good keeper.	.10	.40	1.25
<b>New Queen.</b> A silver-skinned variety, of quick growth and remarkable keeping qualities	.10	.40	1.25
<b>Prizetaker.</b> Large, pale yellow skin; flesh white; mild flavor.	.10	.40	1.25
<b>White Portugal.</b> A mild and desirable summer variety, flat in shape, extensively grown for pickling	.10	.40	1.25

## Onion Sets

Onion sets should be planted near the surface as early in the spring as the ground will permit, in drills about twelve inches apart and four inches in the rows. They produce a very early and profitable crop, and grow in any good soil.

*Add 8 cents per pound if sent by mail, and for larger shipments by mail, see rates on page 2 of cover.*

<b>Japanese Onion Sets.</b> This onion gives a greater yield than any onion set on the market, besides being a good keeper and of fine flavor.	1 lb.	8 lbs.
	.35	\$2.00
<b>White Onion Sets.</b> Ready in April.	.35	2.00

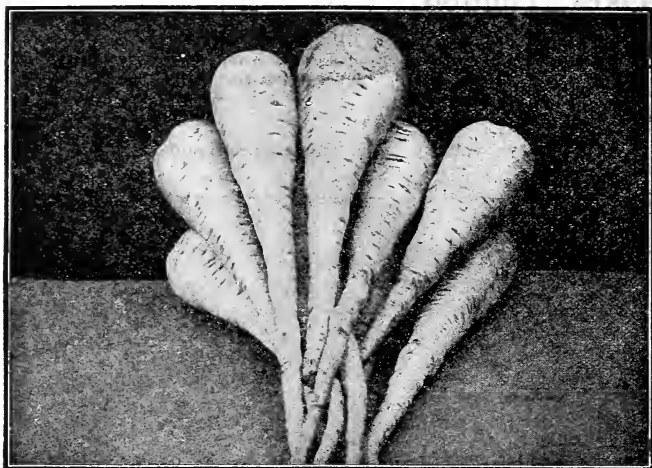
For larger quantities, prices will be given on application.

## Parsley

Parsley seed germinates very slowly, taking two to four weeks to come up; hence, if wanted early, no time should be lost by delaying the sowing. Make the rows twelve to fourteen inches apart. Thin to three or four inches apart, or transplant at this distance. Can be sown in hotbeds in February, or later in open ground. Late in autumn place glass frames over some of the plants to lengthen out the season of cutting. For garnishing purposes nothing equals parsley; it is also used in salads, soups, etc. Any good soil is suitable for growing this plant.

*One ounce to 150 feet of drill.*

<b>Extra Double Curled.</b>	Pkt.	Oz.	$\frac{1}{4}$ lb.
	.10	.15	.45



ABBOTT'S IMPROVED PARSNIP

## Parsnip

Sow as early in the spring as the weather will admit, in drills fifteen inches apart, covering half an inch deep. When well up thin out to five or six inches apart in rows. Unlike carrots, they are improved by frosts, and it is usual to take up in the fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as required.

*One ounce to 150 feet of drill;  
5 pounds to the acre.*

**Abbott's Improved.** Smooth and quite large; one of the best.

Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.15	.50	\$1.50

**Hollow Crown.** Roots very long, growing mostly below the surface of the ground.

Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
.10	.15	.50	\$1.50

**THE DON.** A variety selected for handsome form, size, whiteness of skin and flesh, and solidity of texture. Specially recommended for market trade..... .10 .20 .50 \$1.50

## Peas

Peas, for an early crop, should be sown as soon as the ground is in working condition. The soil for their reception should be light, dry and well sheltered. Mild manure has a beneficial effect, but for many of the varieties the soil cannot be too rich. For general crops, the ground should be well manured the previous year, which causes them to yield more abundantly. When grown as a market crop, peas are never staked, and are grown in single rows, two or three inches deep, and from two to three feet apart, according to the variety or strength of the soil. When grown in small quantities for private use, they are generally sown in double rows six or eight inches apart, and the tall varieties staked up by brush.

*Two pounds will plant 75 to 100 feet of drill; from 84 to 112 pounds to the acre.*

*Peas ordered by mail are subject to an extra charge of eight cents per pound for postage. For larger quantities by mail, see rates on page 2 of cover.*

<b>INOCULATE THIS SEED WITH FARMOGERM</b>
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## Extra Early

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Qual- ity.	Price.
	Inches.	Inches.					1 lb. 2 lbs. 14 lbs.
Blue Bantam .....	20	4 $\frac{1}{2}$	77	Med. dark green	Pointed	Fine	.45 .85 \$4.75
Early Eight Weeks. (See page 19).....	14	3	55	Dark green	Blunt	Good	.45 .85 4.75
Early Morn.....	36	4	73	Med light green	Med. pointed	Fine	.35 .60 3.50
Gradus.....	36	4	73	Med. light green	Med. pointed	Fine	.35 .60 3.50
Laxtonian .....	19	4 $\frac{1}{2}$	76	Med. dark green	Med. pointed	Fine	.45 .85 4.75
Laxton's Progress.....	18	4	72	Med. dark green	Pointed	Fine	.45 .85 4.75
Little Marvel.....	18	3 $\frac{1}{2}$	76	Med. dark green	Blunt	Fine	.35 .60 3.50
Nott's Excelsior .....	15	3	72	Med. light green	Blunt	Fine	.35 .60 3.50
Peter Pan .....	18	4	76	Med. dark green	Pointed	Fine	.45 .85 4.75
Sutton's Excelsior .....	18	4	78	Med. dark green	Blunt	Fine	.35 .60 3.50
Sutton's Pioneer .....	16	4	76	Dark green	Pointed	Fine	.45 .85 4.75
Thomas Laxton .....	32	3 $\frac{3}{4}$	73	Med. light green	Med. pointed	Fine	.35 .60 3.50
World's Record.....	36	4	69	Med. light green	Med. pointed	Fine	.35 .60 3.50





## PEAS—Continued

## Second Early

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.		
	Inches.	Inches.					1 lb.	2 lbs.	14 lbs.
Bliss' Everbearing.....	36	3	85	Light green	Blunt	Fine	.35	.60	\$3.50
Dwarf Telephone.....	30	4 $\frac{3}{4}$	82	Med. light green	Med. pointed	Fine	.35	.60	3.50

## General and Late Crop

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.		
	Inches.	Inches.					1 lb.	2 lbs.	14 lbs.
Admiral Dewey.....	60	4 $\frac{3}{4}$	87	Dark green	Pointed	Fine	.35	.60	\$3.50
Carter's Telephone (improved dark pod).....	63	4 $\frac{1}{2}$	83	Dark green	Pointed	Fine	.35	.60	3.50
Carter's Quite Content.....	48	4 $\frac{1}{2}$	83	Dark green	Pointed	Fine	.40	.75	4.00
Incomparable.....	36	4 $\frac{1}{2}$	83	Dark green	Pointed	Fine	.35	.60	3.50
Mammoth Sugar (edible pods).....	48	4	95	Med. green	Med. pointed		.40	.75	
Prince Edward.....	60	4 $\frac{3}{4}$	85	Dark green	Pointed	Fine	.35	.60	3.50
Yorkshire Hero.....	30	3 $\frac{1}{2}$	85	Light green	Blunt	Fine	.35	.60	3.50

## Field Varieties

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.	
	Inches.	Inches.					15 lbs.	60 lbs.
Black-Eyed Marrowfat.....	48	3 $\frac{1}{2}$	98	Light green	Blunt	Fine	\$2.40	\$9.00
White Canada.....	48	3	95	Light green.	Blunt	Poor		
White Marrowfat.....	48	3 $\frac{1}{2}$	98	Light green	Blunt	Fine	2.40	9.00

## Pepper

Grown largely for pickles. Sow in hotbeds early in April and transplant to the open ground when the weather is warm and settled. The rows should be two feet apart and the plants fifteen inches apart in the rows. Rich, warm, mellow soil.

*One ounce of seed will produce about 2,000 plants.*

	Pkt.	Oz.
<b>Large Bell.</b> Large and mild flavor; ripens bright red. Used for stuffed peppers.....	.10	.50
<b>Long Red Cayenne.</b> Bright red; very productive; the flesh very pungent.....	.10	.75
<b>Monstrous Sweet Spanish.</b> A very attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe.....	.10	.85
<b>Red Cherry.</b> Small, round, smooth, glossy scarlet fruit .....	.10	.75
<b>Sweet Mountain or Mammoth.</b> Similar to the Bell, but larger.....	.10	.85

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## Potatoes (Maine Grown)

10 to 12 bushels, or about 4 barrels, sufficient for one acre. One peck will plant 75 hills.

Prices quoted on application.

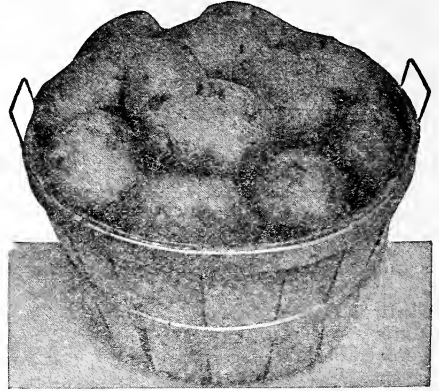
**Early Rose.** (Selected.) The pioneer of all the improved varieties, still very popular and highly esteemed.

**Improved Green Mountain.** (Certified.) Improved by careful selection of seed. In season it is medium; one of the best yielders and keeps well; color white, form round or oval, smooth skinned and a heavy yielder.

**Irish Cobbler.** (Certified.) One of the most reliable of the early varieties. Cream-white color, vigorous grower, ripens uniformly and a good keeper.

Certified potatoes have been examined by state inspectors, twice in the field and once after being harvested, and are certified by them to be true to name and as free as possible from disease.

Selected potatoes have been grown by reliable growers under their personal supervision for seed purposes, but have not been examined by state inspectors.

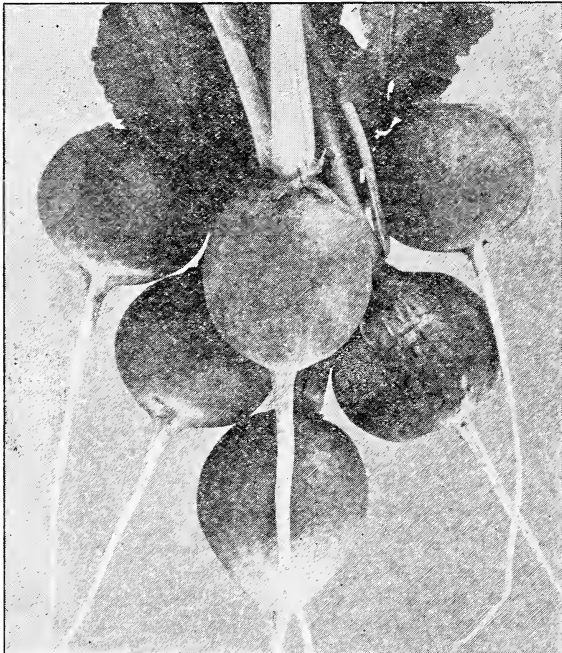


## Pumpkin

Same cultivation as for cucumbers and melons.

One ounce for 20 to 25 hills; 3 pounds for an acre.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Connecticut Field.</b> Large; used for stock.....	.10	.15	.35	\$1.00
<b>Mammoth King.</b> The best large pumpkin in use. Immense, globular shaped, flattened a little at the end. Skin reddish yellow in color, and flesh rich orange. This is unquestionably the best mammoth pumpkin, running very uniform in shape and color.....	.10	.15	.45	1.50
<b>Mammoth Tours.</b> Grows to enormous size, frequently weighing from 100 to 150 pounds. Oblong in shape, and is mainly used for feeding stock.....	.10	.15	.45	1.50
<b>Quaker Pie.</b> A creamy-white, pear-shaped pumpkin of rich flavor and a good keeper .....	.10	.20	.60	2.00
<b>Sugar or New England Pie.</b> For making pies this variety cannot be excelled. The pumpkins are small, but very sweet, fine-grained and of the best quality. ....	.10	.15	.40	1.25
<b>Winter Luxury.</b> Generally regarded as the finest quality pie pumpkin. Besides its high quality it is the best winter keeper of all. In size about nine or ten inches in diameter; skin is a beautiful deep orange yellow.....	.10	.20	.60	2.00



SCARLET TURNIP RADISH (white tip)

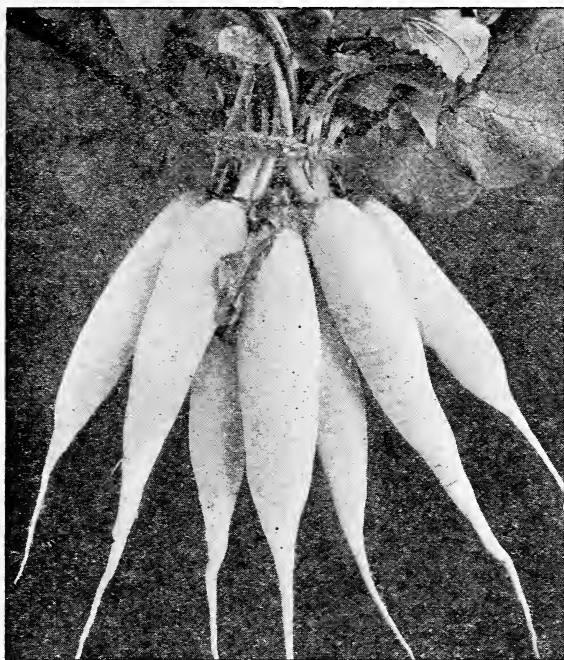
## Radish

Radishes thrive best in a light, rich, sandy loam; heavy or clayey soils not only delay their maturity, but produce crops much inferior, both in appearance and flavor. For a successive supply, sow from the middle of April until September, at intervals of two or three weeks. For an early supply they may be sown in a hotbed in February.

One ounce for 100 feet of drill.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Crimson Giant Forcing.</b> Rich crimson color, flesh white and solid, and of a mild and delicious flavor. Grows to a large size without becoming pithy. Excellent for forcing. ....	.10	.15	.45	\$1.50
<b>Early Scarlet Globe.</b> Fine for forcing. Shape roundish oval; large, brilliant red; flesh white, solid, crisp and mild.....	.10	.15	.45	1.50
<b>Early Scarlet Turnip (white tip).</b> Handsome bright scarlet color, with white tip. ....	.10	.15	.45	1.50

## RADISH—Continued



ICICLE RADISH

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Early Scarlet Turnip.</b> Round, scarlet, small, short top, mild and crisp .....	.10	.15	.45	\$1.50
<b>French Breakfast.</b> A variety of quick growth; very mild and tender. One of the best for forcing. ....	.10	.15	.45	1.50
<b>Iceicle.</b> Quick growing; clear white. Fine for forcing .....	.10	.15	.45	1.50
<b>Long Scarlet Short Top.</b> Very long and crisp; for frames or open ground .....	.10	.15	.45	1.50
<b>Non Plus Ultra.</b> The earliest forcing rad- ish; extra early, ma- turing in about twen- ty days; round, bright red, with small tops; very mild .....	.10	.15	.45	1.50

## Rhubarb

Sow in drills eighteen inches apart and one inch deep. Thin out the plants to six inches apart. In the fall prepare the permanent bed by trenching two feet deep, mixing a liberal quantity of manure with the soil. Into this set the plants about five feet apart each way. The stalks should not be cut until the second year.

*One ounce should give about 500 plants.*

	Pkt.	Oz.
<b>Linnaeus.</b> Early, large, tender and of very fine quality.....	.10	.25

## Spinach

For spring and summer use, sow in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession. For winter and early spring use, sow in September in well manured ground; cover with straw on the approach of severe cold weather. The New Zealand spinach, which requires more room, may be started from seed early in spring to give greens during the heat of summer.

*One ounce to 50 feet of drill; 10 to 12 pounds to the acre.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Fall or Winter.</b> One of the hardiest for fall planting .....	.10	.15	.25	\$ .75
<b>King of Denmark.</b> For quick growth, fine appearance, and lasting qualities, it is the best early variety. (See page 20) .....	.10	.15	.30	.85
<b>Long Standing.</b> Dark green; the longest standing before going to seed.....	.10	.15	.25	.75
<b>New Zealand.</b> Of branching habit; makes a very large plant, which stands drouth well. Leaves thick and fleshy, enduring the entire summer.....	.10	.15	.50	1.75
<b>Round Thick-Leaved.</b> A valuable variety, with thick, dark green leaves; long standing and hardy .....	.10	.15	.25	.75

*Market gardeners, and others using large quantities, are requested to write for special quotations.*

## Salsify (Oyster Plant)

Commonly called vegetable oyster. Used stewed, boiled or fried. When cooked has an oyster flavor. Sow early in drills fifteen inches apart; cover the seeds with fine soil, an inch and a half deep.

*One ounce to 50 feet of drill.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Mammoth Sandwich Island</b> .....	.10	.30	\$1.00

## Squash

Any good, rich soil is adapted to the growth of the squash. They only thrive well in a warm temperature, as all the varieties are tender annuals, and the seed should not be sown in the spring until all danger from frost is past and the ground is warm and thoroughly settled. The hills for bush varieties should be about six feet apart; for running sorts, ten feet. Leave two plants to a hill.

*Running varieties, 1 ounce to 20 hills; 4 pounds per acre. Bush varieties, 1 ounce to 50 hills; 2 pounds per acre.*



	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Boston Marrow.</b> A much esteemed variety; a good keeper and of excellent flavor .....	.10	.15	.50	\$1.75
<b>Delicious.</b> In color it closely follows the Hubbard, and in thickness of flesh it surpasses nearly every variety. No squash compares with it in fineness and compactness of grain, dryness and sweetness and richness of flavor. It is a fall and winter squash, but does not acquire its best qualities until winter. ....	.10	.15	.50	1.75
<b>Hubbard.</b> Standard winter squash, a general favorite and grown more extensively than any other late variety. Color dark green, shell extremely hard, flesh dry, fine grained and sweet; excellent keeper .....	.10	.15	.50	1.75
<b>Hubbard, Blue.</b> Hard shell, light blue in color, thick meat, dry and fine quality. Favorite winter sort.....	.10	.35	\$1.25	4.00
<b>Hubbard, Golden.</b> Similar to Green Hubbard, of a rich orange-red color, and of fine flavor .....	.10	.15	.50	1.75
<b>Hubbard, Warded.</b> Dark green color, shell hard and warded; good keeper....	.10	.15	.50	1.75
<b>Mammoth Chili.</b> Grows to a large size, often weighing over two hundred pounds; excellent for stock .....	.10	.15	.50	1.75
<b>Summer Crookneck.</b> Early, productive and of good quality; color orange yellow .....	.10	.15	.40	1.50
<b>Yellow Bush Scalloped.</b> An early market variety; excellent for shipping.....	.10	.15	.30	1.00

## Tomato

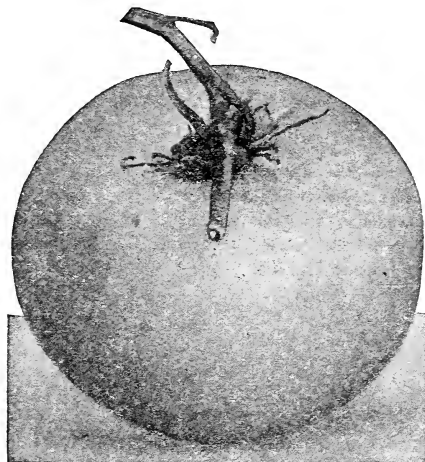
This vegetable is one of the most important of all garden products. They thrive best in a warm, light, rich soil. For early plants, sow about the first week in March in a hotbed, or in boxes or pots in a warm window. When the plants are about two inches high, set four inches apart in boxes three inches deep, or pot singly. If again transplanted before setting out, the plants will be still more stocky. Set out in the open ground about the first of June, four feet apart each way, using a shovel-ful of rotted manure in each hill.

*One ounce will produce about 2,000 plants.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Bonny Best.</b> Color an intense scarlet. It is roundish and slightly flattened at stem end. Early, prolific and uniform in shape and size .....	.10	.35	\$1.00
<b>Burbank's Early.</b> A new variety; considered to be the earliest tomato grown.....	.10	1.00	
<b>Chalk's Early Jewel.</b> A fine second early tomato, about ten days later than Earli-ana. Fruit large size and fine flavor. The plants are compact and strong; one of the best for shipping and the home garden.....	.10	.35	1.00
<b>Dwarf Champion.</b> Dwarf variety; fruit medium size, resembling the Acme in color. ....	.10	.35	1.00

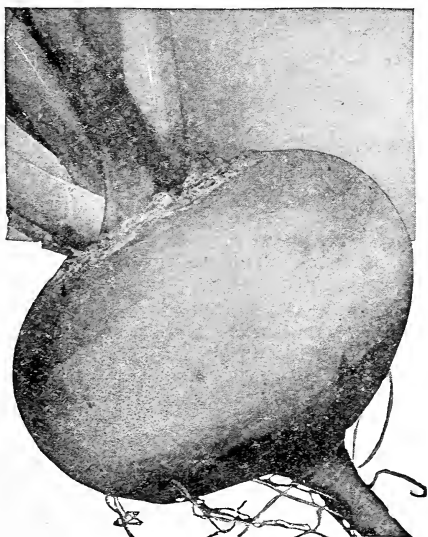
**TOMATOES—Continued**

	Pkt.	Oz.	$\frac{1}{4}$ lb.
<b>Dwarf Stone.</b> The largest fruited of the dwarf varieties, the fruit being of a bright scarlet, and growing in clusters; flesh very solid, firm and smooth.....	.10	.35	1.00
<b>EARLIANA.</b> A very large early tomato, its large size, handsome shape, beautiful red color, and fine quality are unsurpassed by any of the best early and medium sorts .....	.10	.35	\$1.00
<b>Early Avon.</b> Earlier than Earliana. Of fine quality, fruit round, bright scarlet, and borne in clusters. (See page 20) ..	.10	\$1.00	
<b>John Baer.</b> An early variety. Smooth, solid fruit, brilliant red in color.....	.10	.50	1.50
<b>New Stone.</b> Fruit very large and deep, bright scarlet, smooth, ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed, of the finest quality .....	.10	.35	1.00
<b>Red Cherry.</b> A small, early variety, size and shape of a cherry; for pickling....	.10	.35	1.00
<b>Yellow Plum.</b> Similar to Red Cherry, excepting color bright yellow.....	.10	.35	1.00

**EARLIANA TOMATO****Tobacco**

*One ounce is sufficient for an acre.*

<b>Connecticut Seed Leaf.</b> One of the best varieties. The leaves are of good width and length and grow closely on the stalk.....	Pkt.	Oz.	$\frac{1}{4}$ lb.
	.10	.30	\$1.00

**PURPLE-TOP WHITE GLOBE****Turnip**

Turnips thrive best in rich, sandy, gravelly soil. The earliest varieties can be sown as soon as the ground can be worked, either in drills or broadcast. For a succession sow at intervals of a fortnight until the last week in July for the fall and main crops. To keep the roots fresh during the winter, they may be placed in a cool, dry cellar and buried with dry sand.

*One ounce for 150 feet of drill; 1 1-2 to 2 pounds in drills or 2 1-2 to 3 pounds broadcast to the acre.*

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
<b>Early White Six Weeks.</b> Pure white; very early .....	.10	.15	.40	\$1.00
<b>Golden Ball.</b> A rapid grower of excellent flavor; bright yellow, good keeper and a superior table variety.	10.	.15	.40	1.00
<b>Purple-Top Milan.</b> The earliest variety in cultivation. Flesh white, hard, and of excellent quality....	.10	.20	.60	2.00
<b>Purple-Top Strap Leaf.</b> Excellent variety for main crop, equally good for spring or fall sowing; white flesh .....	.10	.15	.40	1.00
<b>Purple-Top White Globe.</b> Globular shape, handsome and of superior quality, either for the table or stock. It is a heavy producer, early and a good keeper. The flesh is white and skin white, with purple at portion which grows above the ground....	.10	.15	.40	1.00

**Ruta Baga or Swede Turnip**

<b>Carter's Imperial Hardy Swede.</b> An improvement upon the other varieties, being larger, the flesh firmer, and an excellent keeper.....	.10	.15	.40	1.00
<b>Lord Derby.</b> Roundish oval, bronze green top; very hardy and long keeper....	.10	.20	.50	1.50
<b>Sutton's Magnum Bonum (purple-top).</b> The finest type of Purple-top Swede that can be grown for general purposes, as it not only yields a great weight per acre, but the crop remains sound for an unusually long time. The feeding value is very high, analysis showing the roots to contain 12.5 per cent. of dry matter .....	.10	.20	.50	1.50



## Sweet and Medicinal Herbs

Sow in spring, in shallow drills, one foot apart, and when well up thin out or transplant to a proper distance apart.

	Pkt.		Pkt.		Pkt.
Anise. Annual .....	.10	Fennel, Sweet. Perennial.....	.10	Rue. Perennial .....	.10
Balm. Perennial .....	.10	Horehound. Perennial .....	.10	Saffron. Annual .....	.10
Basil, Sweet. Annual .....	.10	Hyssop. Perennial .....	.10	Sage. Annual .....	.10
Caraway. Biennial .....	.10	Lavender. Perennial .....	.10	Summer Savory. Annual.....	.10
Catnip. Perennial .....	.10	Marjoram, Sweet. Annual.....	.10	Thyme. Perennial .....	.10
Coriander. Annual .....	.10	Mint .....	.10	Wormwood. Perennial .....	.10
Dill. Biennial .....	.10				

## Grass Seed and Clover

**Timothy.** The most popular grass to sow for hay.

**Red Top.** Succeeds in almost any situation. Fine for lawns or to sow with timothy for hay.

**Kentucky Blue Grass.** One of the best grasses for pastures and lawns.

**Orchard Grass.** A valuable grass for pasture and also for hay.

**Red Clover.** Used both in mixtures for hay and for pasture.

**Alsike Clover.** More hardy than red clover and succeeding well where the ground is low and wet.

**White Clover.** Used largely for lawns and in pasture mixtures.

**Crimson Clover.** An annual clover used for plowing under to enrich the soil.

## Forage Seeds, Grain, Etc.

### AT THE LOWEST MARKET RATES AND OF THE BEST QUALITY

**Barley (Chevalier).** A two-rowed variety. Head a little longer than the six-rowed varieties and the grain larger, plump, extra heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, and is also extensively grown for green fodder.

**Buckwheat (Japanese).** The most desirable variety. If sown at the same time as the Silver Hull it will ripen earlier and yield nearly double the amount. It is of much stronger growth than the common buckwheat and the kernels are fully twice the size.

**Millet (Japanese Barnyard).** Succeeds in almost any ordinary soil, and may be sown from the middle of May to the first of July. Is distinct from other varieties. Enormous crop, and is excellent, either green or cured, for hay. Exceedingly popular as a forage plant.

**Millet (Hungarian).** Probably used more than any other millet for fodder during the summer months. Remains green when almost all other vegetation has dried up. It is one of the very best plants for green fodder or for ensilage; makes hay of good quality.

**Soudan Grass.** A new annual forage crop. Soudan grass is a drought-resistant hay crop of great merit. In dry sections it yields more forage than millet, and the hay is relished by stock of all kinds. After the ground has become warm, seed may be sown broadcast at the rate of from 16 to 24 pounds per acre; if planted in drills 18 to 24 inches apart, from 4 to 6 pounds per acre will be sufficient.

**Storm King Oats.** This oat is a heavy cropper, the grain is short, plump, thin skinned and of high feeding value. The straw is very strong, so that it stands severe weather.

**Swedish Oats.** One of the most productive varieties of oats ever introduced. The straw is very firm, stiff and elastic and does not readily lodge. Early and ripens uniformly. The kernel is large and plump, with a thin hull, and of fine general appearance.

**Rosen Rye (Winter).** Produces a strong, vigorous straw and stools to a remarkable degree. The grain is large, plump, heavy and of beautiful color, commanding a premium on the market over other grains. Owing to its vigorous stooling property less seed is required, the practice being about  $1\frac{1}{2}$  bushels per acre. At the State Experimental Farm in Michigan, for a number of years the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain, and 46 bushels per acre is not an unusual yield.

**Rye (Spring).** For a catch crop this is best for sowing in the spring, as a crop may be obtained by later sowing than any other grain, although it does not yield as heavily as the winter rye.

**FORAGE SEEDS, GRAINS, ETC.—Continued**

**Marquis Wheat (Spring).** A variety produced by scientific cross-breeding of the hard Calcutta and frost resisting Red Fife variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis wheat is similar to Red Fife, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than Fife. It is beardless, having smooth yellow chaff, but its most valuable feature lies in its earliness, as it matures a week or ten days earlier than the Red Fife. Thrashing reports from the Northwest indicates yields of 40 to 50 bushels per acre; weight, 64 to 66 pounds per measured bushel, and they report it to be of the highest milling quality. Not in many years has such a valuable variety been introduced. Our stock is of the highest purity and germination. Farmers who planted Marquis wheat in New England last season had most satisfactory returns.

Write for quotations on all grain and grass seeds.

**"New Era" Cow Peas**

The seed resembles a small brown bean in appearance, and is one of the best varieties to sow, as it is extremely early, a good cropper, and produces more seed pods than most other kinds. A very valuable forage plant. Sow at the rate of  $1\frac{1}{2}$  bushels per acre.

Write for price.

**Early English Dwarf Essex Rape**

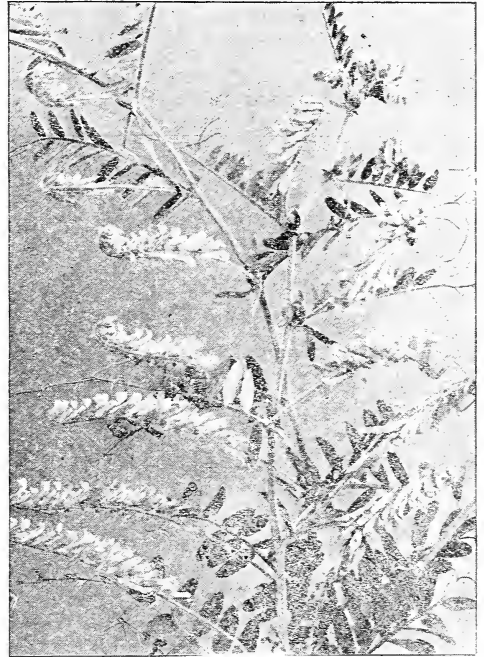
Superior to any other variety offered.

A forage plant of great merit, easily grown in any locality, and one of the most satisfactory quick-growing crops, especially for sheep.

As a fattening food for sheep, cattle, calves or pigs, it is without a rival in point of cheapness, is hardy, withstands drought, and will produce a crop in any soil. The seed may be sown from May to July, 10 to 12 pounds per acre.

Per lb., 20 cts. Per 100 lbs., \$18.00.

INOCULATE THIS  
SEED WITH  
FARMOGERM



VETCHES

**Vetches or Tares**

**Spring Vetches.** Highly valuable for soiling or for green manuring. Sometimes grown with oats for mowing and feeding to stock. Use 120 to 180 pounds to the acre broadcast, or 60 to 120 pounds in drills.

Write for price.

**Winter Vetches.** Also called Sand Vetch or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, can be harvested or plowed under and the ground used for the usual spring crop. Sow 60 pounds of the seed per acre, together with  $\frac{1}{2}$  bushel of rye.

Write for price.

**Soja Beans**

Produce an enormous crop of both vines and pods. Valuable as a forage crop, and for fertilizing the soil, also for pasturing, feeding as green fodder, and for silo purposes. Sow  $\frac{1}{2}$  bushel to the acre.

Write for price.

INOCULATE THIS  
SEED WITH  
FARMOGERM



SOJA OR SOY BEANS

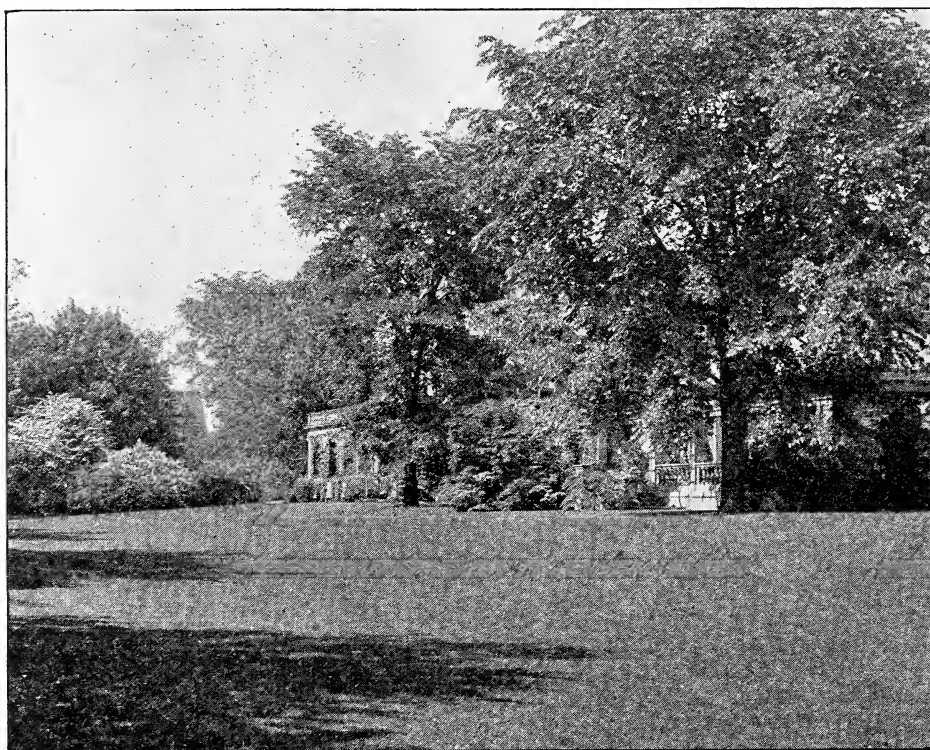
ALL LEGUMES — INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA



## K. & W. Lawn Grass Seeds

The essentials for a fine lawn are: First, a rich, well-drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot summer sun. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sort is required for a perfect, carpet-like lawn. It may be planted early in spring or fall and should be sown at the rate of seventy-five pounds per acre. If sown in the spring, sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain, which if the surface has just been raked will cover the seed sufficiently. For fall seeding, sow before the autumn rains and early enough to enable the young grass to become well established before very cold weather, when a light dressing of manure should be given. Weight per bushel about 25 pounds.

Many low priced grass seed mixtures weigh only fourteen pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.



1 lb. to 300 square feet.

75 lbs. per acre.

### PRICES

1 lb., 50c.; 5 lbs., \$2.40; 10 lbs., \$4.60; 25 lbs., \$11.00

### Fair Green Mixture

Price—Per lb., 55c.; per 100 lbs., \$45.00

### Putting Green Mixture

Price—Per lb., 80c.; per 100 lbs., \$75.00

If sent by mail, add eight cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 2 of cover.



## Books on Rural Topics

All books sent postpaid on receipt of price.

### Agriculture

Farm Grasses of the U. S. ....	\$1.75
Farm Manures .....	2.00
Farmers' Cyclopaedia of Agriculture.....	4.50
Soils .....	1.75
Study of Corn .....	1.00
The Right Use of Lime in Soil Improvement.....	1.25
The Young Farmer: Some Things He Should Know..	2.00

### Fruit Growing

American Apple Orchard .....	\$1.75
American Fruits (new).....	4.75
Bush Fruit Production (new).....	1.25
Modern Fruit Marketing .....	1.75
Principles and Practice of Pruning.....	2.50
Strawberry, The (new) .....	1.25

### Dairying and Live Stock

Cheese Making (new).....	\$2.50
Farm Dairying .....	2.00
First Lessons in Dairying.....	.90
First Principles of Feeding Farm Animals.....	2.00
Management and Feeding of Sheep.....	2.50
Questions and Answers on Butter Making.....	1.00
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### Practical Manuals for Vegetable and Flower Garden

Asparagus .....	\$1.00
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Cabbage, Cauliflower and Allied Vegetables.....	1.00
Celery Culture .....	1.00
Dahlia Production (new).....	1.25
The Gladiolus (new) .....	1.25
The Iris (new) .....	1.25
Garden Guide .....	1.10
Milady's House Plants .....	1.10
Mushroom Growing .....	2.00
New Onion Culture.....	1.00
Peas and Pea Culture.....	1.00
Book of Landscape Gardening.....	2.00
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Sweet Corn .....	1.10
The Potato .....	1.10
Tomato Production (new).....	1.25
Vegetable Forcing .....	2.50

### Poultry Books

A Living from Eggs and Poultry.....	\$1.40
Canary Birds .....	.60
Poultry Breeding and Management.....	2.00
Ducks and Geese .....	2.00
Turkey Raising (new) .....	1.75

## Valuable Table Showing the Quantity of Seed Usually Sown upon an Acre.

	Lbs. per bush.		Lbs. per bush.		
Alfalfa .....	.60	20 lbs.	Onion Sets, in drills.....	.32	6 to 12 bu.
Barley (broadcast).....	.48	2 to 3 bu.	Orchard Grass .....	.14	3 bu.
Beans, Dwarf, in drills.....	.60	90 lbs.	Parsnip, in drills.....		5 lbs.
Beans, Pole, in hills.....	.60	20 to 25 lbs.	Peas, smooth (field varieties), broadcast.....	.60	180 lbs.
Beets, Mangel Wurzel.....	5 lbs.	5 lbs.	Peas, wrinkled, in drills.....	.56	70 lbs.
Beets, Table, in drills.....	6 lbs.	6 lbs.	Perennial Rye Grass.....	.24	2½ to 3 bu.
Buckwheat .....	.48	1 bu.	Potatoes (cut tubers).....	.60	10 to 12 bu.
Cabbage, in beds to transplant.....		4 to 5 oz.	Pumpkin, in hills .....		3 lbs.
Carrot, in drills.....		3 to 4 lbs.	Radish, in drills .....		8 to 10 lbs.
Clover, Alsike .....	.60	10 lbs.	Red Top (re-cleaned).....	about 32	6 to 8 lbs.
Clover, Crimson .....	.60	20 lbs.	Rhode Island Bent, chaff seed.....	.10	3 bu.
Clover, Red .....	.60	15 to 20 lbs.	Rhode Island Bent (fancy re-cleaned).....	.40	20 lbs.
Clover, White .....	.60	8 to 10 lbs.	Rough Stalked Meadow .....	.14	2½ to 3 bu.
Corn, for fodder, in drills.....	.56	70 to 84 lbs.	Rye, broadcast .....	.56	1½ to 2 bu.
Corn, Sweet, in hills.....	.50	15 lbs.	Sage, in drills.....		8 to 10 lbs.
Creeping Bent .....	.20	3 bu.	Sheep Fescue .....	.12	2½ to 3 bu.
Crested Dogstail .....	.21	1½ to 2 bu.	Spinach, in drills.....		10 to 12 lbs.
Cucumber, in hills.....		2 lbs.	Squash (bush varieties), in hills.....		2½ lbs.
English Rye Grass .....	.24	3 bu.	Squash (running varieties), in hills.....		4 lbs.
Fine-leaved Fescue .....		35 lbs.	Soudan Grass (broadcast).....		16 to 24 lbs.
Hard Fescue .....	.48	30 lbs.	Sweet Vernal (annual).....	.10	2 bu.
Hungarian .....		1 bu.	Sweet Vernal (perennial).....	.10	2 bu.
Italian Rye Grass .....	.18	2½ to 3 bu.	Tall Fescue .....	.14	2 bu.
Kentucky Blue Grass .....	.14	3 bu.	Tall Meadow Oat Grass.....	.14	4 to 5 bu.
Lawn Grass .....	.25	3 bu.	Timothy .....	.45	¾ bu.
Meadow Fescue .....	.15	2 bu.	Tobacco .....		1 oz.
Meadow Foxtail .....	7	3 bu.	Tomato, to transplant .....		4 oz.
Melon, Musk, in hills.....		2 to 3 lbs.	Turnip, broadcast .....		2½ to 3 lbs.
Melon, Water, in hills.....		4 to 5 lbs.	Turnip, in drills .....		1½ to 2 lbs.
Millet, German .....	.50	1 bu.	Various Leaved Fescue.....		30 lbs.
Millet, Japanese .....	about 40	25 lbs.	Vetches .....		(See page 43)
Oats, broadcast .....	.32	2 to 3 bu.	Wheat, broadcast .....	.60	1½ to 2 bu.
Onion, in drills.....		5 lbs.	Wood Meadow .....	.14	2 to 2½ bu.

## Quantity of Seeds Required for a Given Number of Hills or Length of Drills.

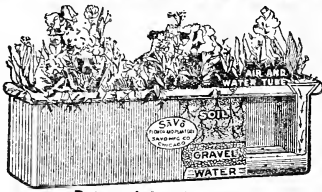
Asparagus .....	1 ounce.....	50 feet of drill	Melon, Musk .....	1 ounce.....	60 hills
Beet .....	1 ounce.....	50 feet of drill	Mustard .....	1 ounce.....	40 feet of drill
Beans, Dwarf.....	2 pounds.....	100 feet of drill	Okra .....	1 ounce.....	40 feet of drill
Beans, Pole .....	2 pounds.....	150 hills	Onion .....	1 ounce.....	100 feet of drill
Carrot .....	1 ounce.....	100 feet of drill	Onion Sets .....	1 pound .....	50 feet of drill
Celery .....	1 ounce.....	100 feet of drill	Parsley .....	1 ounce.....	150 feet of drill
Corn, Sweet .....	1 pound .....	125 hills	Parsnip .....	1 ounce.....	150 feet of drill
Cress .....	1 ounce.....	100 feet of drill	Peas .....	2 pounds.....	75 to 100 feet of drill
Cucumber .....	1 ounce.....	50 hills	Pumpkin .....	1 ounce.....	20 to 25 hills
Dandelion .....	1 ounce.....	150 feet of drill	Radish .....	1 ounce.....	100 feet of drill
Kale .....	1 ounce.....	150 feet of drill	Salsify .....	1 ounce.....	50 feet of drill
Kohl-rabi .....	1 ounce.....	200 feet of drill	Spinach .....	1 ounce.....	50 feet of drill
Leek .....	1 ounce.....	150 feet of drill	Squash, bush variety.....	1 ounce .....	50 hills
Lettuce .....	1 ounce.....	125 feet of drill	Squash, running variety.....	1 ounce.....	15 hills
Martynia .....	1 ounce.....	50 hills	Turnip .....	1 ounce.....	150 feet of drill
Melon, Water .....	1 ounce.....	30 hills			

## Ferti-Flora

A liquid fertilizer for potted plants which supplies all the elements needed to make them grow and bloom. It is without disagreeable odor and is ready for use by simply adding it to the water when watering the plants.

Price, 40 cents per bottle

### THE SĀVŌ STEEL All-Year-Round Flower Box



Patented Jan. 23, 1917

Self-Watering and Sub-Irrigating  
FOR  
Windows, Porches, Sun Parlors, etc.

#### PRICES

Model A, 8 in. high, 9½ in. wide, 23 in. long, \$3.00  
Model B, 8 in. high, 9½ in. wide, 29 in. long, 4.00

## STIM-U-PLANT

PLANT STIMULANT TABLET

An All-the-Year Fertilizer for  
Garden and House Plants

Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-plant, an odorless, highly concentrated plant-food, in tablet form, with guaranteed chemical analysis of 11 per cent. nitrogen, 12 per cent. phosphoric acid, 15 per cent. potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant-food exactly when and where and as needed.

Make Your Garden  
a Wonder Garden

These tablets increase production, heighten color and improve quality immediately. Many professional and amateur growers use them extensively all the year round - from early spring until late fall outdoors, during the winter for potted plants, hothouse benches, etc. They are as fine for evergreens and other trees as for all garden and potted plants.

#### Easy to Use

Simply insert tablets in soil near plants, or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package.

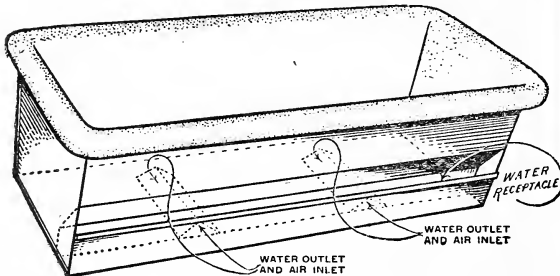
Order Stim-U-plant tablets with your seed and plant order.

#### PRICES

Trial size, 15 cents; small size, 25 cents  
100 tablets, 75 cents; 1,000 tablets, \$3.50

## Success Window Box

THE BOX THAT MAKES THE PLANTS GROW



#### PRICES

24 inch ..... \$1.50  
30 inch ..... 2.00  
36 inch ..... 2.75

## Plant Stakes

From one and one-half to six feet in length, used for supporting single stalks of roses, dahlias, etc.

#### SQUARE STAKES

	Per doz.	Per 100
1½ feet, painted green, tapered,	\$.30	\$2.00
2 " " " "	.50	3.50
2½ " " " "	.65	5.00
3 " " " "	.95	7.00
4 " " " "	1.50	11.00
5 " " " "	2.10	16.00
6 " " " "	2.35	18.00

#### BAMBOO STAKES

Five feet long, tapering from about one-half inch at base.

Per dozen, 60 cents; per hundred, \$4.00

## Standard Flower Pots



Inches	Pots Per dozen	Saucers Per dozen
2	\$ .18	
2½	.25	
3	.35	\$ .28
3½	.40	.35
4	.50	.38
5	.85	.50
6	1.25	.70
7	2.10	.95
8	3.00	1.25
9	4.75	1.80
10	5.85	2.10
11	9.25	2.50
12	12.50	3.10
14	21.00	5.40

Measurement from inside to inside. Width and depth equal.

## Improved Neponset Paper Flower Pots

Advantages over earthenware pots:

1. They save all losses from breakage.
2. Weigh just one-tenth as much.
  - (a) Easier to handle.
  - (b) Reduce freight and express bills.
3. Hold moisture better.
4. Much less expensive.

Pots are made from a tough, lasting and thoroughly waterproof paper.

Ideal for transplanting and shipping potted plants and for rooting or shipping strawberry, tomato and cabbage plants.



Size	Per doz.	Per 100	Per 1,000	Size	Per doz.	Per 100	Per 1,000
2½	\$ .08	\$ .45	\$3.50	4	\$ .18	\$1.10	\$9.00
2½	.10	.50	4.10	5	.30	1.70	14.10
3	.12	.70	5.50	6	.35	2.25	18.85
3½	.15	.85	7.25				

## Round Seed and Bulb Pans

Inches	Each	Per doz.	12	1.20	12.50
6	\$ .11	\$1.25	10	.55	5.85
7	.20	2.10	9	\$.45	\$4.75
8	.28	3.00	Inches	Each	Per doz.

Special quotations to florists

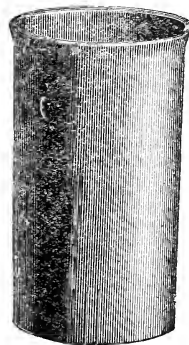
## Florists' Vases

FOR DISPLAYING CUT FLOWERS

No.	0	8 inches in diameter,	13 inches deep	
"	1	5½	"	\$1.55 each
"	2	4½	"	1.35
"	3	4	"	1.20
"	4	3	"	1.05
"	00	9	"	.85
"	01	7	"	4.65
"	11	5½	"	2.75
"	22	4½	"	1.85
"	38	4	"	1.65
"	44	3	"	1.50
				1.15

## LACQUERED FLOWER POT SAUCERS—Waterproof

Inches	Each	Per doz.	Inches	Each	Per doz.
5	\$ .10	\$1.00	7	\$ .20	\$2.00
6	.15	1.50	8	.25	2.65



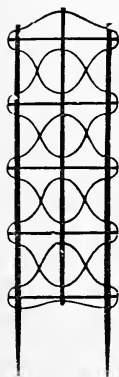
## Trellises

VERANDA TRELLIS

5x1½ ft.	\$2.25	\$25.00
6x1½ ft.	2.65	30.00
7x1½ ft.	3.20	36.00
8x1½ ft.	3.50	40.00
9x1 2-3 ft.	4.00	45.00
10x1 2-3 ft.	4.35	50.00
11x2 ft.	4.75	55.00
12x2 ft.	5.25	60.00

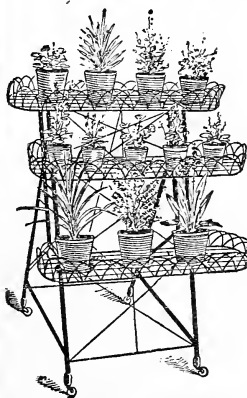
FAN TRELLIS

1½ ft., width at top 6 inches,	\$ .45	\$ 4.00
2 " " " 10 "	.55	6.00
2½ " " " 13 "	.85	8.00
3 " " " 16 "	1.25	14.00
3½ " " " 21 "	1.50	16.00
4 " " " 27 "	2.00	22.00
5 " " " 32 "	2.50	27.00
6 " " " 38 "	3.00	32.00
7 " " " 42 "	3.35	37.00
8 " " " 46 "	3.75	42.00



VERANDA TRELLIS

## Wire Plant Stands



1 shelf, folding,	\$3.50
2 " "	4.50
3 " "	5.50
4 " "	7.25

## WICKER STANDS

With Galvanized Iron Lining

30-inch, \$6.50 to \$7.75

# Fertilizers

## Wizard Sheep Manure

### Will Make Your Plants Grow to Perfection

Wizard Sheep Manure is a natural concentrated manure that makes all plants grow to perfection. It is convenient and absolutely weedless. **One bag equals a whole wagon load of stable manure.** There is nothing better than this weedless manure for lawns, gardens, fruit and field crops.



**LAWNS.** Wizard produces a thick velvety green turf of lasting beauty. In making new lawns scatter broadcast 10 pounds to every 100 square feet and rake into the surface soil. On old lawns use 6 to 10 pounds per 100 square feet.

**FLOWER GARDENS.** Luxuriant green foliage and a wealth of vivid colored flowers are the result of feeding your plants Wizard.

**VEGETABLES AND FRUITS.** If you want a big crop of crisp, tender vegetables, be sure to use Sheep Manure. Every successful gardener knows that there is nothing better than manure for vegetables. Wizard improves the yield, color and flavor of fruit crops.

**FIELD CROPS.** Wizard Sheep Manure builds up the soil and produces big crops at the same time. Flows freely through a drill. Puts new life into the soil. Use 300 to 1,000 pounds per acre.

**FLORISTS.** Wizard is unexcelled for feeding plants grown under glass. Safe, pure, and weedless. Fine for mixing with bench and potting soil and liquid manuring. Ask for free booklet.

## Ashes

Unleached, hard wood ashes, put up in 100 lb. bags. Especially valuable for lawns.

## Agricultural Lime

### WHAT WILL LIME DO?

1. Furnish much-needed plant food.
2. Render available certain forms of plant food, especially compounds containing potash, phosphoric acid and ammonia.
3. Correct acidity.
4. Promote the decomposition of organic matter by encouraging the growth and activity of micro-organisms.
5. Promote the growth of organisms that gather nitrogen from the air.
6. Improve the physical texture of the soil.

Price: 100 lb. bags, \$1.00; ton, \$13.00.

## TENNESSEE

## Phos-Pho-Flour

### What It Is—

The finest and most readily available portion only, of finely ground high-grade phosphate rock, separated by air current and like flour in texture. It carries 60 to 65 per cent. bone phosphate of lime (B-P-L), equivalent to about 30 per cent. phosphoric acid. As a fertilizer it pays for itself by the increased yield the first season, and the beneficial effect lasts for several years. As an absorbent it is excellent, a valuable feature for dairymen.

Price: 100 lb. bags, \$1.25; ton, \$20.00

## Land Plaster

Land plaster supplies sulphur in a form readily available, and also furnishes calcium, a very important element. It greatly benefits peas, beans, cabbage, turnips, potatoes and onions. To use around the stable as a deodorizer, and to absorb the ammonia, it is of great value.

For garden crops use from 400 to 800 lbs. per acre, and for field crops about half this amount.

Price: 100 lb. bags, \$1.25; ton, \$20.00.

## Special Fertilizers

For Seeding Down Grass and Grain.

## Top Dressing

Corn, Potatoes, Cereals.

## Agricultural Chemicals

Nitrate of Soda. 18.23 per cent. ammonia.

Sulphate of Ammonia. 24.50 per cent. ammonia.

Muriate of Potash. 48 per cent. actual potash.

Sulphate of Potash. 48 per cent. actual potash.

Ground Tankage. 6 per cent. ammonia, 30 per cent. bone phosphate of lime.

Ground Tankage. 9 per cent. ammonia, 20 per cent. bone phosphate of lime.

Plain Superphosphate or Acid Phosphate. 16 per cent. phosphoric acid.

Special Ground Bone. 2.5 per cent. ammonia, 50 per cent. bone phosphate of lime.

As prices on chemicals change frequently, please write for prices, stating kind and amount desired.

# **Bowker's Fertilizers**

## **and Stockbridge Manures**



Used four hundred pounds Bowker's Fertilizer and raised over fifteen tons of squash

**"For the Land's Sake" use Bowker's  
Fertilizers and Stockbridge Manures**

We are still selling the old original Stockbridge Potato and Vegetable Manure, containing 10% potash. That is the brand that has produced the largest crop of potatoes ever recorded.





479  $\frac{1}{4}$  Bushels Per Acre on Bradley's Fertilizer  
First Prize Boys' Potato Club of Maine

## Feed Your Crops As You Feed Your Stock

Modern stock rations which rightly balance the digestible proteins, carbohydrates and fats have revolutionized profits in live stock. They have produced more milk, more beef, more pork, more fat, more eggs.

You know it—every farmer does.

## Bradley's Fertilizers

Supply plant food rations rightly balanced for your crops. They produce more corn, more potatoes, more truck, more money. They save labor and enable you to keep more stock.

A full stock of these standard fertilizers constantly on hand, including

XL Superphosphate of Lime 3-10-4

Corn Phosphate 2-8-2

Northland Potato Grower 4-8-4

Acid Phosphate 0-16-0

Potato Manure 3-8-4

Blood, Bone and Potash 5-8-7

Grass and Lawn Top Dressing 6-6-4

Complete Manure for Potatoes and Vegetables 4-8-7

Also Agricultural Chemicals and Agricultural Limestone

KENDALL & WHITNEY, Agents,

- - - - - Portland

## Croquet Sets

We carry a complete assortment, manufactured from selected hard wood, handsomely painted and varnished.

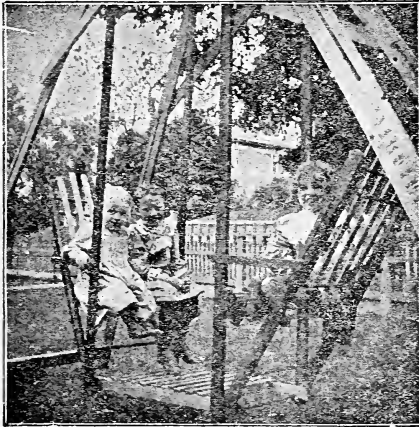
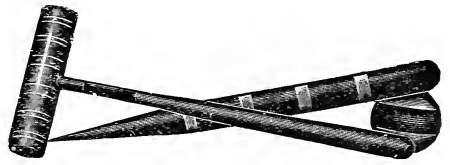
**No. 1A.** Eight-ball set, all parts varnished, mallets painted, \$3.75.

**No. 4.** Eight-ball set, 5½ in. mallets, selected wood, nicely finished, \$4.25.

**No. 5X.** Eight-ball set, 8 in. mallets, short handles, painted and striped, \$5.00.

**No. 2X.** Professional eight-ball set, 8 in. mallets, short handles, selected, polished, three-stripe balls, \$6.00.

**No. 40.** Six-ball set, painted and varnished, small size balls and mallets, made especially for a children's set, \$1.75.



## The Westfield Lawn Swing

This swing easily takes precedence over all others in the market. It is made of hard wood, well finished, and so constructed that it may be readily folded together when put away for the winter. Any child can operate it with perfect ease and safety.

Made in two sizes, two passenger and four passenger.

Prices quoted on application

## Folding Lawn Settee

Made from hard wood and finished in varnish and vermilion, or green.

Price, \$2.75

## TROWBRIDGE'S GRAFTING WAX

The finest quality made, put up in neat packages with directions for use.  
1 lb. packages, 45c; ½ lb. packages, 25c; ¼ lb. packages, 15c. By mail, 8c per lb. extra.

## BLAKE'S GRAFTING WAX

Will not run in hot weather.  
1 lb. packages, 45c; ½ lb. packages, 25c; ¼ lb. packages, 15c. By mail, 8c per lb. extra.  
**BEESEX.** 50c per lb. By mail, 8c per lb. extra.

## Tomato and Plant Supports



Bartlett

Designed especially to protect tomatoes,  
peonies, and small shrubs and  
tall growing plants

### THE BARTLETT

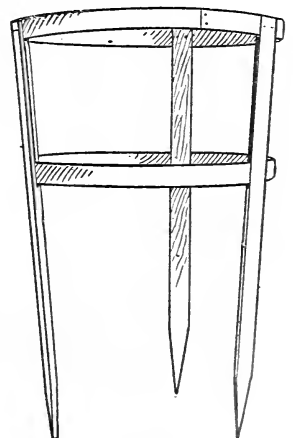
MADE FROM HARD WOOD, WITH WIRE HOOPS

Price, 35 cents each; \$3.25 per dozen

### THE BRYANT

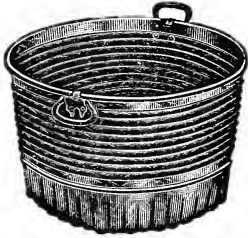
MADE OF HARD WOOD STANDARDS AND  
WOOD HOOPS

Price, 20 cents each; \$1.75 per dozen



Bryant

## Quality Hand Tools and Sundries



Galvanized Iron Basket



Asparagus Knife



Turf Edger



4 Tined Hay Fork



Spading Fork



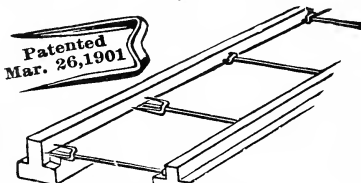
3 Tined Hay Fork



Manure Fork



Garden Line Reel



Glazing Point

### Asparagus Knives

\$ .40; by mail, \$ .50

### Axes

Single bit,	1.60	"	"	1.70
Double Bit	2.00	"	"	2.10

### Axle Grease

#### Mica:

1 lb.,	.20	"	"	.28
3 lbs.,	.50	"	"	.60

#### Snowflake:

1 qt.,	.45	"	"	.53
2 qts.,	.75	"	"	.86
4 qts.,	1.25	"	"	1.40

### Ball, Ox

Brass, each,	.10 to .25; by mail, .13 to .28
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### Bars, Crow

Solid cast steel, lb.,	.12
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### Baskets. See page 67

### Border Shears

9-in., with wheel,	\$5.00; by mail, \$5.15
9-in., no wheel,	4.75 " " 4.90

### Bouquet Holders

#### Iron, tulip shaped:

Small,	.45	"	"	.55
Medium,	.55	"	"	.65
Large,	.70	"	"	.80
Stone,	.30	"	"	.40

### Brackets

Flower Pot, one and two pot,	\$ .45, \$ .55
By mail,	.53, .63

### Brooms

House and Stable,	.75, 1.45
By mail, add	.10

### Brushes

Bottle, each:	
No. 61,	\$ .45; by mail, \$ .52
No. 86,	.70 " " .77
Dust, each: No. 2, \$ .60; No. 3, \$ .65; No. 4, \$ .70	
By mail, add	.08
Floor, each,	\$1.40 to \$4.25
By mail, add	.12
Scrub, each: No. 0, \$ .20; No. 1, \$ .25; No. 3, \$ .30	
By mail, add	.08
Stove, each:	No. 31, \$ .35; No. 41, \$ .45
By mail, add	.08
Window, each:	No. 50, \$ .65; No. 5, \$1.10
Wire Caterpillar,	\$ .50; by mail, \$ .58

### Bull Rings

Copper:	
2 in.,	.35 " " .40
3 in.,	.40 " " .45

### Edging Knives

D handle,	1.25
Long straight handle,	1.20

### Files

Round, Slim Taper and Mill	
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### Forks

Hay Forks, 3 tine, 13-in., 14-in., 15-in. tine,	\$1.30, \$1.70
Manure Forks, 4 tine, 5 tine, 6 tine,	1.50 2.00
Spading Forks, 4 tine,	1.65

### Fruit Pickers

Wire, without pole,	\$ .60; by mail, \$ .70
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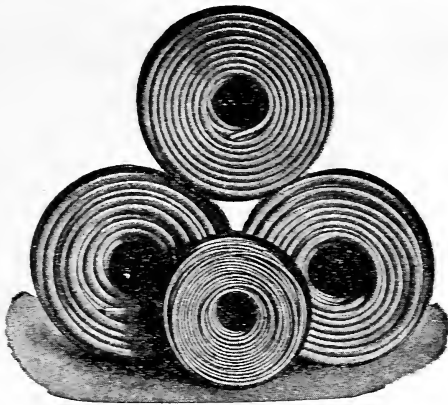
### Garden Lines, 50 ft.,

.50 " " .58
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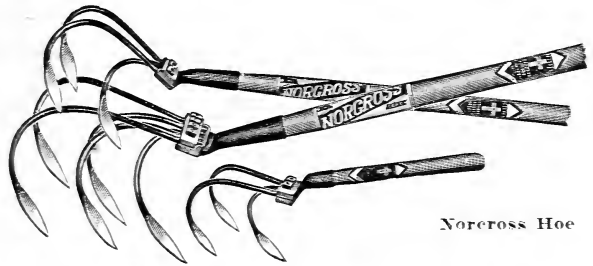
### Garden Line Reels

2.00 " " 2.12
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## QUALITY HAND TOOLS AND SUNDRIES--Continued



Garden Hose



Norcross Hoe



Boston Hose Nozzle

Garden Hose, in 50-ft. lengths.

Per ft.,	$\frac{1}{2}$ -in.	$\frac{5}{8}$ -in.	$\frac{3}{4}$ -in.
	\$.16	\$.17	\$.19

## Garden Tools

Set of Hoe, Rake and Spade. \$1.85; by mail, \$2.00

Glazing Points, per M., .75 " " .83

## Gloves

All cotton, or cotton with leather palm, \$.20, \$.50  
By mail, add 5 cents.

Grafting Chisels \$1.00; by mail, \$1.07

Grafting Wax. See page 51.

Grass Catchers \$1.10, \$4.50

Grass Hooks .50, .65  
By mail, add 10 cents.

## Grass Shears

Goodwin Shears. See page 61.  
Sheep Shear Pattern. \$.50, \$1.75  
By mail, add 8 cents.

## Grindstones

Mounted, No. 1, each, \$13.00  
Mounted, No. 2, each, 11.75  
Unmounted, per lb., .06

## Guards

Flower Bed: 16-in. 22-in.  
Per ft., \$.11 \$.13

## Handles

Axe, \$.35 to \$.60; by mail, add \$.10  
Hay Fork,  $3\frac{1}{4}$  ft. to 6 ft., .35 to .65 " " " .12  
Hoe, .30 " " " .10  
Manure Fork, .65 " " " .12  
Pick, .50 " " " .12  
Rake, .50 " " " .10  
Shovel, .75 to .80 " " " .10

## Hedge Shears

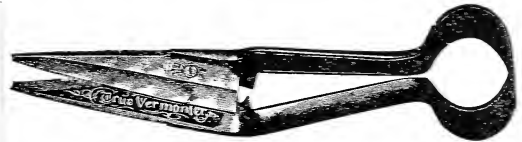
8-in. 9-in. 10-in.  
\$2.50 \$2.65 \$2.80  
by mail, 2.60 2.75 2.90

Hose Menders, \$.15; by mail, \$.18

Hose Nozzles .85 " " .93

Hose Racks \$.35

Hose Reels, Steel 2.50

No. 10, 2.00  
Reeleezy,

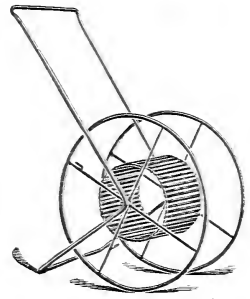
Grass Shears



Hedge Shears



Grafting Chisel



Hose Reel No 10



Field Hoe



Warren Hoe

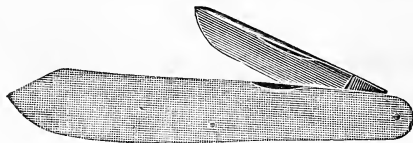


Scuffle Hoe



Fruit Picker

## QUALITY HAND TOOLS AND SUNDRIES--Continued



Budding Knife



Pruning Knife

Steel Garden Rake  
Bow Shank

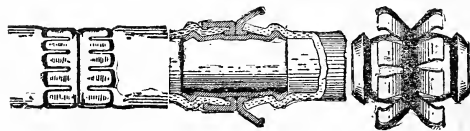
Steel Garden Rake



Wire Lawn Rake



Potato Hook



Hose Mender



Double Edge Saw



No. 16 Saw



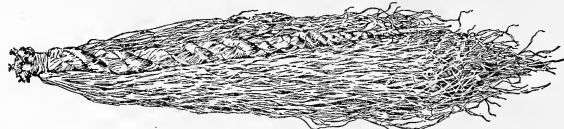
Pick Mattock



Axe Mattock



Pick



Raffia

### Hoes

Field Hoe,	\$1.00, \$1.10
Norcross Hoe, 3 tooth,	.75
Norcross Hoe, 5 tooth,	1.00
Potato Hoe,	.90, 1.40
Scuffle Hoe,	1.10
Warren Hoe,	1.10

### Knives

Bread Knives (see page 62),	\$1.00; by mail, \$1.10
Budding Knives,	\$1.10, 1.50
By mail,	1.15, 1.55
Hay Knives,	1.75; by mail, 1.90
Pruning Knives,	\$1.00, 2.15
By mail,	1.05, 2.20

### Labels, Wood Pot

Plain	Painted
4 in., per M., \$1.30	4 in., per M., \$1.70
4½ in., " 1.45	4½ in., " 1.90
5 in., " 1.60	5 in., " 2.10
6 in., " 2.00	6 in., " 2.50
By mail, add \$ .10 per M.	

### Labels, Wood Tree

3½-in. copper wire,	\$2.30; by mail, \$2.40
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### Mattocks

Axe Mattock,	1.00	"	"	1.15
Pick Mattock,	1.00	"	"	1.15

### Nail Hammers

.75	"	"	.82
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### Picks

Contractor's Pick,	1.10	"	"	1.25
Railroad Pick,	1.00	"	"	1.15

Plant Stands. See page 47.

Pots. See page 47.

Powder Guns. See page 111.

### Plant Tubs

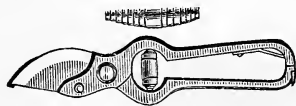
Cedar, painted green:

12-in., 15-in., 16-in.

Oak:

12-in., 14-in., 16-in., 18-in., 20-in., 22-in.

## QUALITY HAND TOOLS AND SUNDRIES--Continued



American Shears



French Shears

## Pruners

Rope Pull:	
8-ft. handle,	\$1.20
10 ft. handle,	1.25
12-ft. handle,	1.35
14-ft. handle,	1.65
16-ft. handle,	1.85
Standard:	
8-ft. handle,	1.75
10-ft. handle,	2.00
12-ft. handle,	2.25

Raffia, per lb., \$ .20; by mail, \$ .28

## Rakes

Bamboo Lawn Rakes,	\$1.25
Hoover Lawn Rakes (see page 61),	1.00
Steel Garden Rakes,	\$ .80, 1.20
Steel Gravel Rakes,	1.00, 1.35
Wire Lawn Rakes,	.90
Wood Hay Rakes,	.60, .80
Wood Lawn Rakes,	.90, 1.00

## Saws

Pruning Saws:	
Double edge, 18-in.,	\$1.10; by mail, \$1.20
Double Edge, 20-in.,	1.20 " " 1.30
No. 16, 14-in. adjustable blade,	2.00 " " 2.10
Wood Saws,	1.50 " " 1.60

Scythes 1.85 " " 2.00

Scythe Snaths- \$1.50

Scythe Stones \$ .15, \$ .25  
By mail, .22, .32

## Shears (for pruning)

American:	
No. 10, 6-in.,	black, \$ .70; nickel, \$1.25
No. 30, 9-in.,	1.10
	By mail, add .07

Clyde (similar to Rockdale, but heavier and has draw cut):

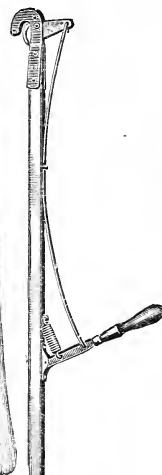
22-in. handle,	\$3.00; by mail, \$3.10
24-in. handle,	3.25 " " 3.35

## French:

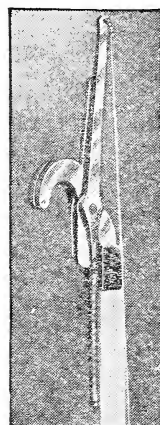
8-in.,	2.25 " " 2.32
9-in.,	2.50 " " 2.57
10-in.,	2.75 " " 2.83



Rockdale Pruner



Standard Pruner



Pruner with rope pull



Solid Steel Scoop



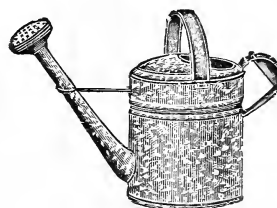
D Handle Square Point Shovel



D Handle Spade

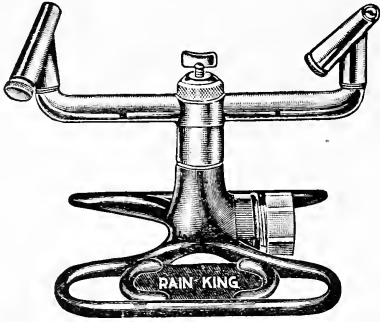


D Handle Round Point Shovel





## QUALITY HAND TOOLS AND SUNDRIES--Continued



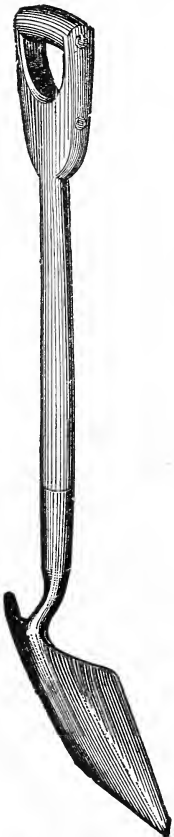
Rain King Sprinkler



Ring Sprinkler



Wire Potato Scoop

Maynard Solid  
Steel Socket  
Shovels and SpadesLong Handle  
Square Point  
ShovelLong Handle  
Round Point  
Shovel

## Shears

## McKenney:

No. 1, 23-in., cuts up to  
1 in. diameter, \$4.50; by mail, \$4.60

No. 2, 30-in., cuts up to  
1½ in. diameter, 6.00 " " 6.12

Rockdale, wood handle:

26-in. handle, 1.65 " " 1.75

41-in. handle, 1.90 " " 2.00

Sheep Shears 1.50 " " 1.57

## Shovels

D handle, square or round  
point, 1.40 " " 1.52

Long handle, square or  
round point, 1.40 " " 1.52

Maynard Socket Shovel, all  
styles, 2.00 " " 2.15

Fox Shovel, square or  
round point, 1.50 " " 1.62

Spades 1.40 " " 1.52

## Sprayers

Tin or galvanized iron, .35 to .60 " " add .12

## Sprayers—Compressed Air

See page 115

## Sprayers—Wheelbarrow

See page 118

## Sprinklers

## Galvanized iron:

4-qt., .75 " " .85

6-qt., .80 " " .93

8-qt., .85 " " .97

10-qt., 1.10 " " 1.22

12-qt., 1.25 " " 1.40

16-qt., 1.50 " " 1.65

## Sprinklers—Lawn

Rain King (gives a revolving  
or stationary spray,  
either fine or coarse), 3.50 " " 3.60

Ring, .85 " " .92

## Stakes. See page 51

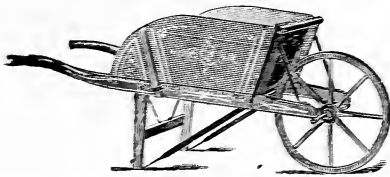
(For supporting plants)

## Supports—Tomato

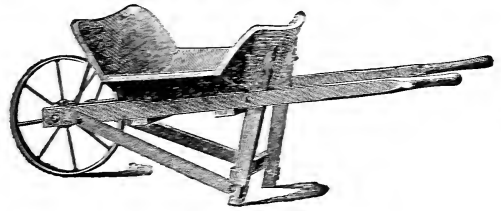
Bartlett. See page 51

Bryant. See page 51

## QUALITY HAND TOOLS AND SUNDRIES--Continued



Garden Barrow



Canal Barrow



Steel Tubular Canal Barrow



Excelsior Weeder



Magic Weeder A

## Thermometers

Dairy.	\$ .50; by mail, \$ .55
Hotbed, wood frame with brass point.	2.00 " " 2.07
Incubator,	.75 " " .80

## Trellises

Bow pattern. See page 47.  
Fan pattern. See page 47.  
Veranda pattern. See page 47.  
Wire. See page 55.

## Trowels

Heavy, 6-in.,	\$ .20; by mail, \$ .25
Ladies' 6-in.,	.15 " " .20
Regular, 6-in.,	.15 " " .20
Solid steel, 6-in.,	.70 " " .77
Solid steel, 7-in.,	.75 " " .82

## Twine

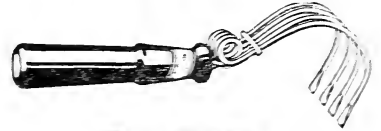
Cotton, ball,	.10 " " .15
Hard, ball,	.45 " " .52
Soft, ball,	.20 " " .27
Tarred Lath Yarn, lb.,	.25 " " .32

## Weeders

Excelsior,	.20 " " .25
Heseltine,	.30 " " .35
Jimmy,	.25 " " .30
Lang,	.25 " " .30
Magic A,	.20 " " .27
Magic C,	.30 " " .37
Midget,	.50 " " .60
Norcross, 3 tooth,	.75
Norcross, 5 tooth,	1.00

## Wheelbarrows

Canal Barrow,	\$6.00
Canal Barrow, all steel.	11.00
Canal Barrow, steel tray.	10.00
Garden Barrow, large.	\$5.50
Garden Barrow, medium.	\$5.00



Magic Weeder C



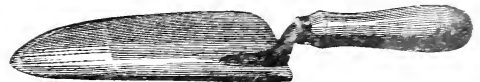
Heseltine Weeder



Jimmy Weeder

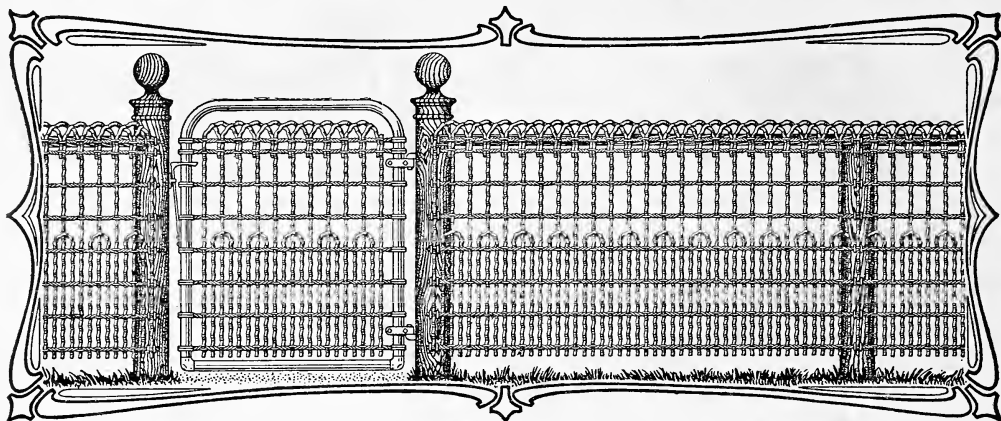


Lang Weeder

Post  
Spoon

Garden Trowel

## Waukegan-Cyclone Sanitary Wire Fencing

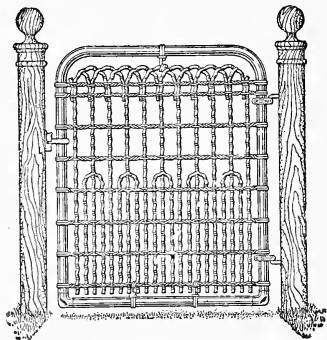


Style "F" fabric shown above on ordinary wood posts opens up the yard to fresh air and sunlight, creates healthy playgrounds out of unsanitary back yards and makes gardens, flower beds, lawns, etc., possible.

Pickets are all No. 9 heavily galvanized wire, spaced  $2\frac{7}{8}$  inches apart at top,  $1\frac{3}{8}$  at bottom, making fence absolutely chicken proof.

**STYLE "F" FABRIC, Three Sizes, 36 inch, 17c. per ft.; 42 inch, 18c. per ft.; 48 inch, 20c. per ft.**

### Universal Garden Gates



These are low-priced, strong, practical and durable. Choice of 36, 42 or 48 inch heights.

3 foot opening.

Write for prices on Garden Gates.

Also on 8, 10, 12, 14 and 16 foot Farm Gates.

### Cyclone Single Trellis

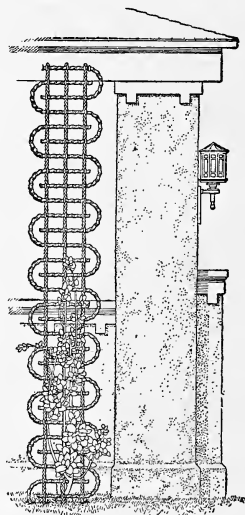
The most practical trellis made for climbing vines and flowers.

Easily placed in position. Cut to any length. Can be used for years, making an extra, low-priced trellis that adds to the beauty of porch and home.

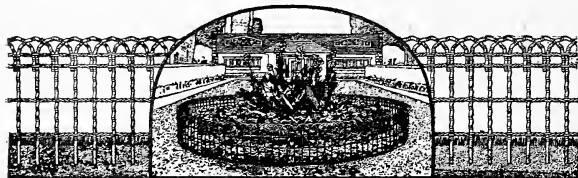
18 inches in width.

14c. per ft.

By mail, 17c. per ft.



### Perfection Flower Guard



Affords ample protection against dogs, cats, chickens, etc., besides keeping children from running over flower beds. Fits any shape or size of flower bed. No posts necessary. Picket ends are left straight for inserting in the ground. Pickets No. 9, cables No. 13 heavily galvanized wire.

Two sizes, 16 inches high, 11c. per ft.; by mail 14c.; 22 inches high, 13c. per ft.; by mail, 16c.

### Steel Fence Posts

LINE POSTS

END POSTS

CORNER POSTS

These posts are easier to set, neater looking, and cannot be destroyed by grass or brush fires.

Write for Prices

#### PRICE CHANGES

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## Pennsylvania Quality Lawn Mowers

**Buy a Lawn Mower Once; Not One Every Year**

Your first purchase can be your last, if you choose the mower that lasts. "Pennsylvania" Quality Lawn Mowers are made to give the longest and most efficient service, even under the hardest usage and the most extraordinary working conditions.

Most professional gardeners choose "Pennsylvania" Quality Mowers because they run easiest, cut cleanest, last longer and require the least care and attention during their long life.

Their economy in comparison to ordinary mowers is striking. Just divide the first cost of a "Pennsylvania" Quality Mower over the long years of work, and compare it to the cost of any other mower covering the short period of two or three years' possible use, to say nothing of the frequent sharpening and repair bills of the ordinary mower.

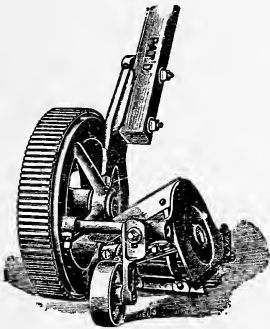
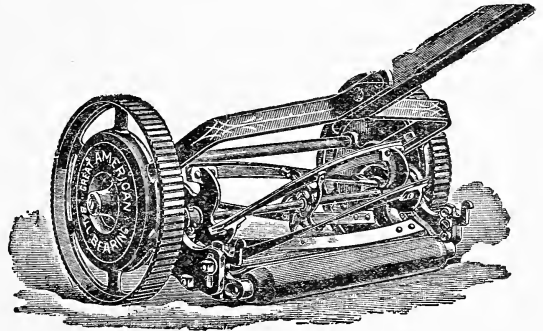
**Self-Sharpening**—A feature exclusive to "Pennsylvania" Quality Mowers is the self-sharpening, crucible tool steel blades. All the revolving blades, as well as the stationary blades, are of same steel as is used for finest tools requiring keenest cutting edges.

### Great American Ball Bearing

This machine is one of the most popular of the "Pennsylvania" line and consequently is more imitated than any other lawn mower manufactured. Raised edge, self-sharpening lower knife, highest grade ball bearings, smooth running, are special features.

10-inch driving wheels. 5 blades.

Sizes	Prices
15-inch .....	\$18.75
17-inch .....	21.00
19-inch .....	23.50
21-inch .....	25.75



### Pennsylvania B. B. Under Cut Trimmer

This machine is the only one to successfully replace the use of hand shears. The slanting side plate and conical cylinder make it possible to cut all the grass left by the regular style of lawn mower. The unique construction of the Under Cut Trimmer permits cutting, not only close up to a wall, fence, trees, etc., but it will get the grass under a fence or rock-cut base of tombstones, house foundations, and other places hitherto out of reach of anything but hand shears. For cemeteries it has the special advantages of not marking or smudging the stones, as the side plate does not come in contact with the stone above the grass line.

Price, \$12.00

### William Penn

9-inch Wheel, 5 Blades

One size only.

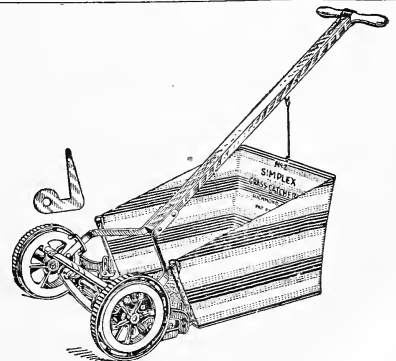
16-inch ..... \$15.00

The latest of the Pennsylvania Quality Lawn Mowers, designed to meet the demand for a five-blade mower less expensive than Great American.

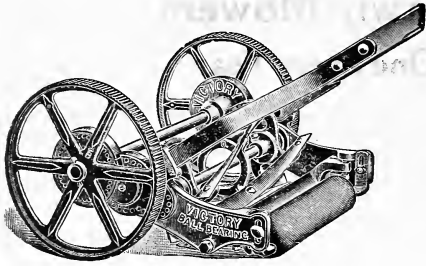
### "Nox-All" Grass Catcher

Will fit any mower made. Instantly attached and detached. Canvas body, galvanized iron bottom, combining strength with lightness.

	Price
No. 1, for 12, 14 and 16-inch mowers....	\$1.10
No. 2, for 16, 18 and 20-inch mowers....	1.25



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## Townsend's "Victory" Mower

Constructed with ball bearings, of the very highest grade. Triple gear, entirely closed. Remarkably smooth running and quiet. 10-inch wheels, 5½-inch reel, 4 blades. Lower blade crucible steel, oil-tempered.

Width of Cut	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Net price:	\$16.25	\$18.00	\$19.50	\$21.00	\$26.50	\$28.50

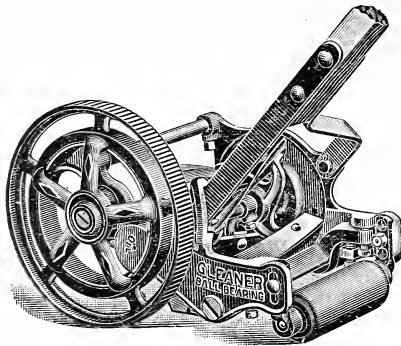
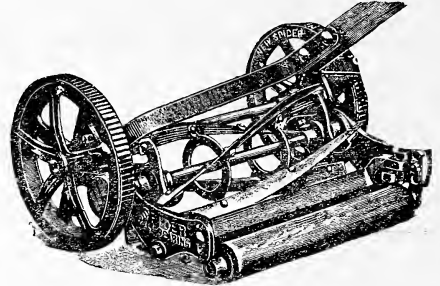
## Townsend's "Spider" Mower

Like the "Victory," the "Spider" runs and cuts with ease and rapidity.

It is light, strong, and finely made and adjusted, and is one of the best **medium priced** lawn mowers ever offered.

Is ball bearing, has 9-inch wheels, four-bladed, open wiper, and a simple and easy adjustment.

Width of Cut	14-in.	16-in.	18-in.	20-in.
Net price:	\$13.00	\$14.50	\$15.75	\$17.00



## Townsend's "Gleaner" Trimmer

Does what lawn mowers leave undone. Trims and edges the lawn with remarkable speed and perfection. 9-inch wheel, ball-bearing; 4 steel blades, 8-inch cut. Strictly high grade in every particular.

Price, \$10.00

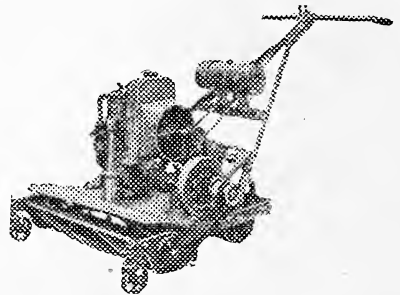
## Coldwell's Model "L" Power Mower

(With the Fuller & Johnson Motor)

### A SMALL MOWER OF LARGE CAPACITY

The Coldwell Model "L" Motor Lawn Mower and Roller, 25-inch cut, has been designed with a view of combining the extreme flexibility of the hand lawn mower with the large cutting capacity, rolling feature and other advantages and conveniences which can be obtained only with a motor mower.

This mower is adapted for use on private lawns, parks, cemeteries, public grounds and for fine cutting on tennis courts and bowling greens.

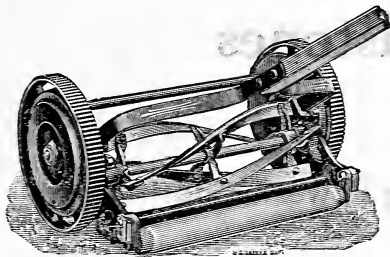


### SPECIFICATIONS

Width of cut, 25 inches.  
Diameter of revolving cutter, 6 inches.  
Number of blades, 5.  
Diameter of drive roller, 8 inches.  
Adjustment for height of cut, ¾ to 2 inches.  
Normal cutting speed, 2½ miles per hour.  
Cutting capacity, 6 acres per day.

Fuel consumption, 1 gallon per day.  
Climbing ability, extreme grades.  
Weight, 335 pounds.  
Motor, Fuller & Johnson.  
Horse power (S. A. E.), 3½.  
Dixie magneto.  
Schebler carburetor.

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## Federal Lawn Mower

The Combined Points Are Price, Simplicity, Durability, Utility

From our ten years' experience with the Federal Mower we do not believe that there is a better low-priced mower on the market.

Width of Cut	Wheels	No. of Blades	Net Price
14-inch	8-inch	$\frac{1}{2}$	\$7.50
16-inch	8-inch	$\frac{1}{2}$	8.00
18-inch	8-inch	$\frac{1}{2}$	8.25

## Speedy Lawn Mower

8-inch wheels, with raised rim

Four-blade cutting reel

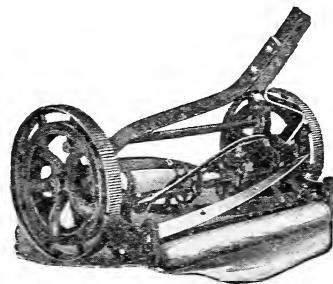
Dust-proof ball bearings

Durable and easy running

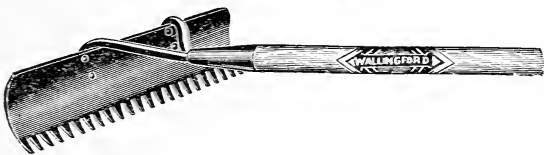
Width of Cut

Net Price

16-inch .....	\$10.50
18-inch .....	11.00



## Lawn and Dandelion Rake



This rake is designed especially for use on lawns, being so constructed, with teeth shaped like saw teeth, that it will not tear the grass roots and will destroy dandelions by cutting off the blossoms before the seed forms. Width of head, 16 inches.

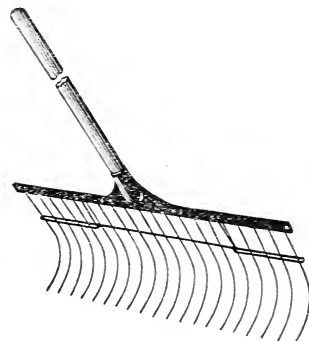
Price, \$1.00

## Hoover Lawn Rake

Made from flexible steel spring wire, the teeth of the Hoover Rake will fit into any irregularities on the surface of the ground, taking all leaves with them, or dirt, or dead grass or refuse, without injury to grass. The head is of heavy enameled steel, and the handle holder is strongly made. Weight, 2 pounds.

The head of the Hoover Rake makes a clean sweep 20 inches wide, with a motion similar to that used in sweeping with a broom. The flexible teeth make it possible to get in under shrubbery and clean out all leaves and refuse without danger to the bushes.

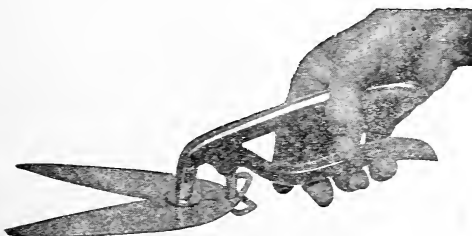
Price, \$1.00



## Goodwin Grass Shear

(It's a Good One)

THE FIRST REAL GRASS SHEAR



The arrangement of the handles in a perpendicular plane, allowing the use of the hand in a free and natural manner, is of prime importance. In using the old type of shear with handles and blades in the same or horizontal plane, the hand and wrist are strained and distorted. This new shear has greater leverage, consequently more power, quicker action; the blades are mechanically held, so the grass cannot slip between without being cut, nor can the blades slip apart. These are very disagreeable features in various old styles of grass shears now on the market.

Price, \$2.00; by mail, \$2.08



## Grindstones

### SAMSON, MOUNTED

Frame of hard wood, securely bolted together, and fitted with both treadle and crank. The stones are of fine quality, from 22 to 26 inches in diameter.

### The Harvest King Power Grindstone

#### For Farm Use

The frame is of heavy angle steel,  $1\frac{1}{4}" \times 1\frac{1}{4}" \times 3\text{-}16"$ , strongly braced, is equipped regularly with our standard high grade selected Cleveland grindstone,  $24" \times 2"$ , a  $\frac{5}{8}"$  shaft,  $12" \times 2\frac{3}{8}"$  pulley and heavy steel roller bearings, hand crank and drip cup.

Weight, with regular equipment, about 125 lbs.

## Empire

The Empire Ball Bearing Power Grindstone is a heavier stone than the Harvest King. The frame and trough are cast iron and the stone is 24 inches in diameter and from two to three and one-half inches thick. It is equipped with a 12" pulley, but turns so easily that it may be turned by hand if desired.

Weight, complete, about 225 lbs.

We also carry a line of

### Unmounted Stones

from 18 to 30 inches in diameter

also

SCYTHE STONES OF VARIOUS KINDS AND GRINDSTONE FIXTURES

Write for Prices

## Dunham Water Ballast Lawn Rollers

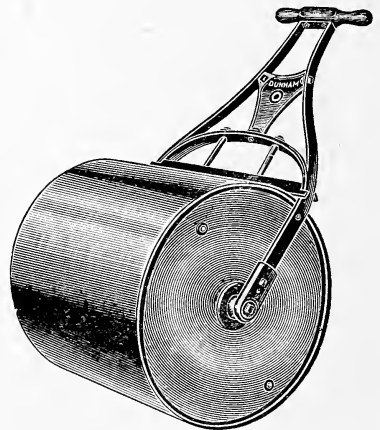
ALL IN ONE { A Light Machine for the Soft, Wet Spring Lawn  
A Heavy Machine for the Dry, Hard Summer Lawn } GUARANTEED  
A Heavier Machine for Walks, Drives, Tennis Courts }

Winter frost and spring thaw heave and crack the sod. Tender grass roots are cut off from subsoil base of supplies—are exposed to death from sun and air. Only light weight roller pressure will properly reset them. Summer sun and wind quickly dry out the top soil. Perfection in shallow growing plant life then depends on the capillary action maintained only by frequent heavy weight rollings. The luxuriant stand of grass which follows intelligently applied rollings is in itself death to weeds. The roller so disturbs moles, ants and similar enemies of the lawn that they soon migrate to other fields. The rolled lawn is the smooth lawn—easy to mow. It's the soft, springy turf of deep green—the best on the street. Try the ROLLER MEDICINE—It's better, cheaper and quicker than watering.

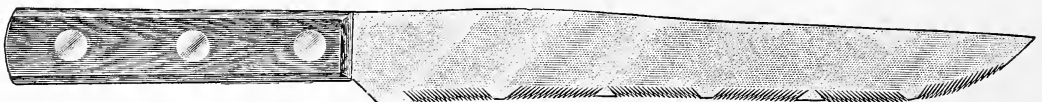
#### General Description

Dunham Water Ballast Lawn Rollers have steel handles, roller bearings, acetylene welded drums with anti-turf-tearing, rounded edges. The most efficient and easiest running roller made.

Catalog No.	No. of Drums	Diameter of Drums	Width of Drums	Rolling Width	Weight Empty	Weight Filled with Water
Ball Bearing 5	1	18 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	85 lbs.	265 lbs.
Ball Bearing 7	1	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	110 lbs.	420 lbs.
Plain Bearing 4	1	18 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	85 lbs.	265 lbs.



## Burns Bread Knife



Makes slicing fresh bread like cutting butter, so easy. Price, \$1.00; by mail, \$1.10.

## Pluro

Cleans everything, and cleans clean, silverware, jewelry, cut glass, china, windows, paint, washes dishes, washes clothes, cleans hands, softens water, deodorizes, disinfects. Try just one can to convince yourself.

Price, 25 cents

## Star Can Opener

Opens Cans Safely

Eliminates Injury

No Danger of Cut Hands

The Star Can Opener enables you to open square, oval, oblong and odd shaped cans with perfect ease, without touching can with hands, without punching hole in can, without leaving jagged edges.

Price, 50 cents; by mail, 55 cents

OUR GUARANTEE—Money refunded if not satisfactory.

## Sure-Grip Glue

THE GLUE WITH A GRIP

It grips wood like iron, without the aid of clamps or tying. It sets quickly, and it is a positive fact that clamps are needed only to bring the several parts together; Sure-Grip will hold them there. Sure-Grip Glue is not affected by atmospheric conditions or dry heat, and will not crystallize as most glues do.

Any furniture or wood work glued with Sure-Grip, according to directions, will stay glued and will not become loose or wobbly.

Price, 25 cents a can; by mail, 30 cents

## Hercules Cold Soder

"THE METAL MENDER"

A Semi-Liquid in Handy Tubes for Easy Mending. Simple, Economical to Use.

Hercules Cold Soder will mend any leak, hole or crack in metal without heat or acid. It is not a welder, however, and will not hold two separate pieces of metal together.

Hercules Cold Soder is guaranteed to mend holes, cracks in aluminum, granite ware, tin, galvanized ware, brass, iron, lead, gas, steam and water pipes. Makes any pipe joint tight. Stops leaks or cracks in auto cylinders, gas tanks, etc.

Price, 25 cents the tube; by mail, 30 cents

## Barrel Header

This is the most simple labor-saving machine ever invented for heading up barrels, and is used extensively for heading up apples, fish and other merchandise.



PRICE (1-inch screw) ..... \$4.25

## Barrel Liners and Pulp Heads

For Apple Barrels  
WRITE FOR PRICES

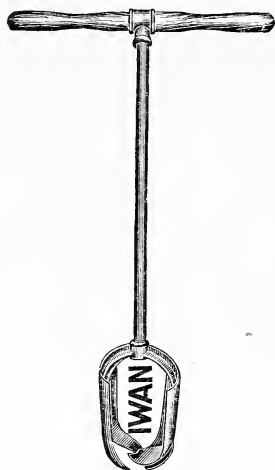
## Hay Ties

No. 15 Cross Head  
6, 6½, 7, 7½, 8, 8½, 9, 9½  
WRITE FOR PRICES

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## Iwan Post Auger

WHY YOU SHOULD BUY AN IWAN



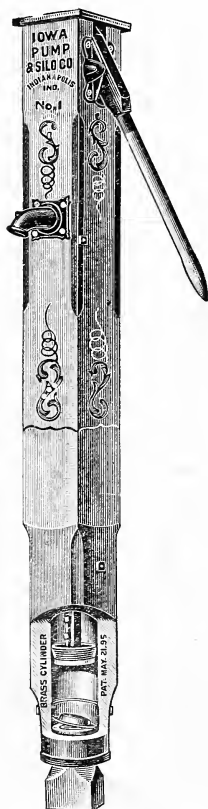
Large cutting surface.  
Great durability.  
Light pressure needed.  
Works satisfactorily on  
wet or dry ground.  
Easily emptied.

### PRICE

4-inch .....	\$2.25
6-inch .....	2.25
8-inch .....	2.50

## Well Buckets

Made from Oak, Heavily  
Hooped.  
Also Light and Heavy Weight  
Buckets made from Galvanized  
Iron.



## Wood Pumps

(With Porcelain or Brass  
Lining)

PUMP CURBS

PUMP FIXTURES

TUBING

CHAIN AND RUBBER  
BUCKETS

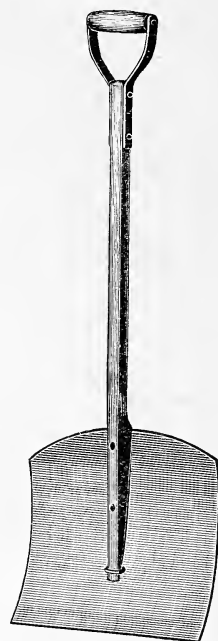
## Oak Kegs

### PRICE

5 gallons -	\$2.25
10 " -	3.00
15 " -	3.30
20 " -	3.75
25 " -	4.25
30 " -	4.75

## Snow Shovels

WOODEN AND STEEL



Spring Steel Blades  
"TROJAN SPECIAL"

### WOOD

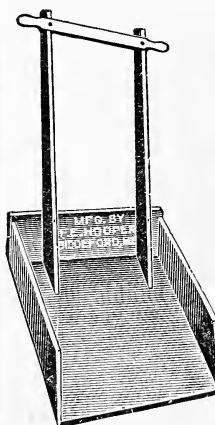
7 x 10.....	\$ .25	11 x 14.....	\$ .50
9 x 12.....	.45	14 x 18.....	.85

### STEEL

D handle .....	\$ .65
Long straight handle .....	.60
Trojan, spring steel blade, 16 x 18.....	1.15

## THE HOOPER Snow Shovels

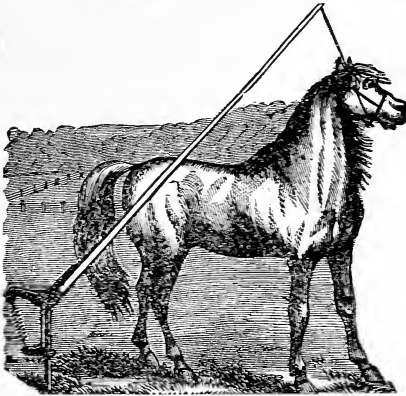
For Railroad Crossings  
and Platforms, Ice Ponds,  
Mill Yards, Flat Roofs,  
Concrete Walks, and Gen-  
eral Shoveling.



### PRICE

2 feet,	\$6.75
2 feet, 6 inches,	7.75
2 feet, 9 inches,	8.25

## Animal Tether



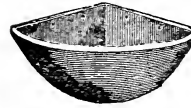
Price, \$5.00

## Hay Knife



Price, \$1.75  
By mail, \$1.90

## Iron Corner Feed Racks and Mangers



Corner Manger



Feed Rack

Write for Prices

WHEN YOU THINK OF GLAZING THINK OF

## Puttium

At Last — A Glazing Cement You Can Buy with Confidence

**A Scientific Formula**—You will find no tar in Puttium. Its basic ingredients are the purest Mexican asphalt combined with just the proper proportion of Gilsonite and high quality Canadian asbestos fibre. Its formula embodies the use of only high-grade materials and scientific mixing, giving to PUTTIUM the elasticity so vitally essential.

Puttium expands and contracts with all extremes of temperature and weather. It will not run in summer or freeze in winter. It will not crack, peel or break. Never becoming brittle, it is easy to remove with a putty knife when necessary.

**Gray Puttium**—By eliminating the asphalt base of Black Puttium and using instead specially-treated non-volatile oils, heat-resisting gums and high-grade imported pigments, the demand for gray glazing cement has been met with Gray Puttium. Containing in addition the correct amount of asbestos fibre, this superior gray cement is ideally suited to all kinds of glazing work and is especially recommended for bedding glass.

PUTTIUM, in black or gray, is sold in steel drums and cans of various capacities. A gallon will glaze from 350 to 400 running feet of sash bar.

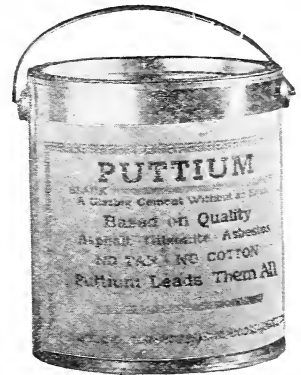
### PRICE LIST (Per Gallon)

#### BLACK PUTTIUM

Bbl., 60 gals. ....	\$1.25
Bbl., 38 gals. ....	1.25
Can, 20 gals. ....	1.35
Can, 10 gals. ....	1.40
Can, 5 gals. ....	1.50
Can, 1 gal. ....	1.60

#### GRAY PUTTIUM

Bbl., 60 gals. ....	\$2.05
Bbl., 38 gals. ....	2.05
Can, 20 gals. ....	2.15
Can, 10 gals. ....	2.20
Can, 5 gals. ....	2.30
Can, 1 gal. ....	2.50



## Bird Cages, Seeds and Supplies

Round and Square Brass and Japan Bird Cages

ALSO

Parrot and Squirrel Cages

CANARY SEED, RAPE, MILLET, HEMP, RICE, SUNFLOWER  
AND CUTTLE FISH

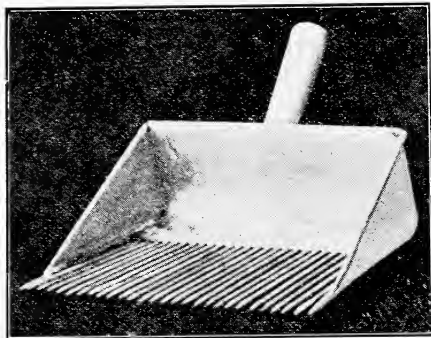
Prepared Mixed Canary Seed

GRAVEL, SONG RESTORER, PARROT FOOD AND  
MOCKINGBIRD FOOD

Cage Springs, Cups, Hooks, Ladder Chains and Wire Guard Cloth



## Blueberry Picker



This picker is made from the best quality of heavy tin, and fitted with points made from the highest tempered steel spring wire. The points are thoroughly soldered, making a very substantial and convenient picker.

Made in the following sizes:

18 point	.....	\$2.35
20 "	.....	2.50
24 "	.....	2.65
26 "	.....	2.75
28 "	.....	2.85
30 "	.....	3.10
32 "	.....	3.15
34 "	.....	3.25
36 "	.....	3.50

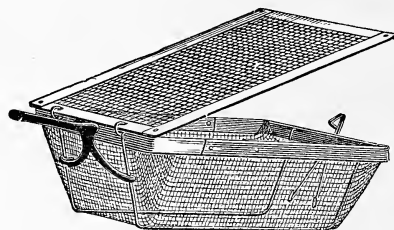
By mail, add 10 cents

18 and 20 point have handle outside, other sizes have handle inside.

## Corn Poppers

Firm and well braced popper with detachable handle, and with wire guards to protect bottom of popper from wear.

PRICE			
1 quart	..... 25c	2 quart	..... 40c
1½ quart	..... 30c	4 quart	..... 70c
8 quart (factory size), \$4.25			

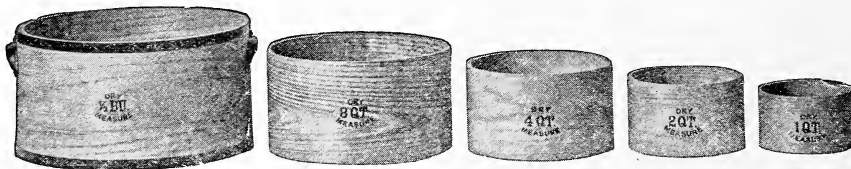


## Popping Corn

**White Rice.** Both shelled and on the cob.

**Little Buster.** Something new. Pops without any hard center. Try it and convince yourself it is the best you ever ate.

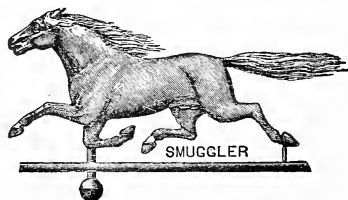
## Wooden Measures



In sets of 1, 2, 4, 8 and 16 quart sizes

Price per set, \$3.25

## Weather Vanes

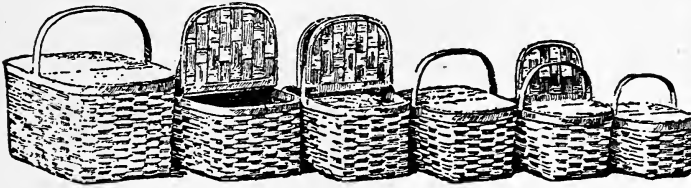


All our vanes are made of copper and gilded with 23-carat gold leaf that will remain bright for years. The vanes include iron spire with steel spindle, points of the compass and gilded balls and letters.

Descriptive Circular and Price List on application

# BASKETS

OF EVERY SIZE AND STYLE FOR FACTORY, MILL, STORE AND FARM  
Corn Packers' Baskets a Specialty. Write for Quotations.



ASH-COVERED LUNCH BASKETS

## One or Two Bail, Ash-Covered Lunch Baskets

No. 0. 25 x 15½ x 12¾ deep.....	\$2.50	No. 4. 15 x 10 x 8 deep.....	\$1.25
No. 1. 23 x 13 x 11 ".....	2.35	No. 5. 14 x 9 x 7½ ".....	1.05
No. 2. 21 x 12 x 9 ".....	1.75	No. 6. 12 x 8 x 6½ ".....	.95
No. 3. 18 x 11 x 8½ ".....	1.50	No. 7. 10½ x 7½ x 6 ".....	.85



HOLE-HANDLED MARKET BASKETS



BAIL-HANDLED MARKET BASKETS

## Solid Oak Market Baskets, with Bail, Hole or Block Handle Strapped

No. 0. 25 x 16 x 7½ deep.....	\$1.50	No. 2. 21 x 12 x 6 deep.....	\$1.00
No. 1. 23 x 13 x 6½ ".....	1.35	No. 3. 18 x 11 x 5½ ".....	.80



Oak Splint Basket

No. 1, 6 bu., solid oak, nailed rim,	\$10.00
No. 1, 5 " " " " " "	7.50
No. 1, 4 " " " " " "	6.50
No. 1, 3 " " " " " "	5.00
No. 1, 2 " " " " " "	2.65
No. 1, 1 " " " " " "	1.65
No. 0, 1 " " " " " "	1.15

## ½ Bush. Basket ¼ Bush. Basket

½ bu., solid oak, n'l'd rim, stiff bail	\$1.00
¼ " " " " " " drop "	.85
¼ " " " " " " drop "	.95
¼ " " " " " " drop "	.75



## The Holden Ash Stave Baskets

One of the smoothest, strongest and best baskets for farmers and grocers.  
Made in every size from ¼ bushel to 4 bushels.

Write for quotations

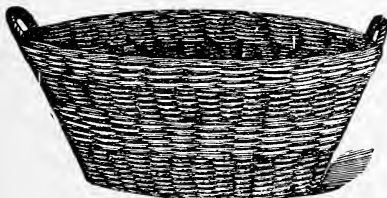


## Oval Willow Clothes Baskets

Small. 18 x 27 x 10½ deep.....	\$1.35
Medium. 19 x 28 x 11 ".....	1.50
Large. 21 x 30 x 12 ".....	1.75

## Oblong Ash Clothes Baskets

Small. 26 x 18 x 10 deep.....	\$1.75
Medium. 30 x 20 x 10 ".....	2.25
Large. 33 x 22 x 10 ".....	2.75



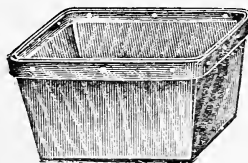
Oval Willow Clothes Basket

Barrel Basket  
85 cents

## Berry Baskets



Oblong Pint



Quart

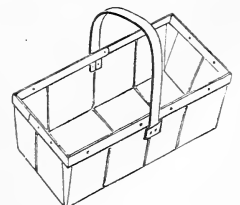
Our berry baskets are made of best quality clear wood and put up in good strong crates. Packed 1,000 in a crate.

Write for prices

## Verbena Baskets

With wood or wire handle.  
10 inches long; 5 inches wide;  
3 inches deep.

Wood handle; 12 inches long;  
7 inches wide; 4 inches deep.



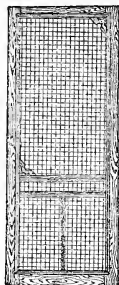
Special prices quoted for large quantities



## High-Grade Screen Doors and Window Screens

OUR SCREEN DOORS are square mortised and tenoned joints throughout, making the strongest and best construction possible.

The wire cloth is placed on the screen door by special machinery, which stretches the cloth drumhead tight. The wire cloth is pressed into a groove in the wood and covered with a flush beaded moulding, mitered at corners, which prevents the cloth from becoming loose and baggy.

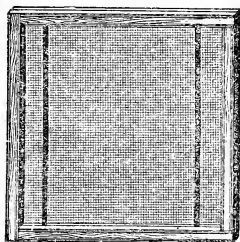


No. 314

### SIZES

2 ft., 6 in. x 6 ft., 6 in.  
2 ft., 8 in. x 6 ft., 8 in.  
2 ft., 10 in. x 6 ft., 10 in.  
3 ft., x 7 ft.

### Adjustable Window Screens

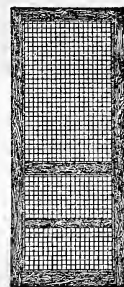


#### The "Continental"

is guaranteed to have perfect adjustment. Wire cloth is securely fastened to frame and covered with moulding. Material used is best hard wood, finished in oil, both sides alike.

### SIZES

No.	High	Closed	Opened
1533	15 in.	21 in.	33 in.
1833	18 in.	21 in.	33 in.
2433	24 in.	21 in.	33 in.
2437	24 in.	23 in.	37 in.

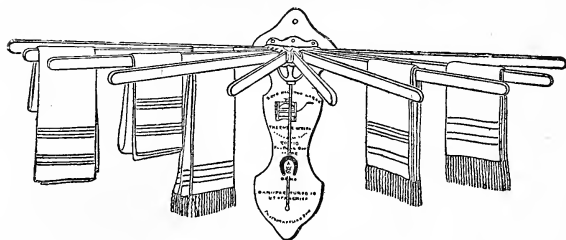


No. 241

### SIZES

2 ft., 6 in. x 6 ft., 6 in.  
2 ft., 8 in. x 6 ft., 8 in.  
2 ft., 10 in. x 6 ft., 10 in.  
3 ft., x 7 ft.

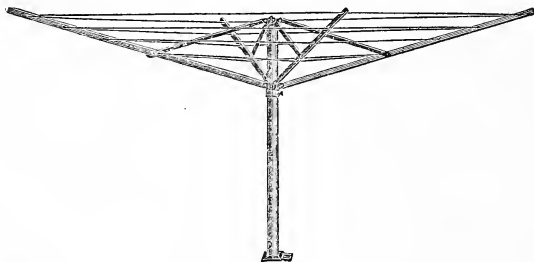
### EMPIRE FOLDING WALL DRYERS



Price, \$1.00; by mail, \$1.12

### ADVANCE CLOTHES DRYERS

The Best Clothes Dryers in Use



No. 1. 120 ft. line, \$8.00      No. 2. 160 ft. line, \$8.50

Balcony Dryers ..... \$16.00

### Continental Sanitary Window Ventilators

Fresh Air  
Without  
Drafts, Dust,  
Rain or Snow

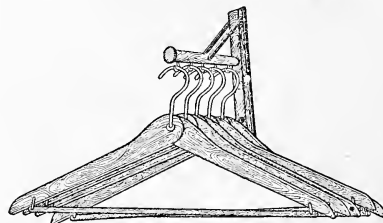


For Bed Rooms,  
Living Rooms,  
Bath Rooms,  
School Rooms,  
Hospitals,  
Offices, Etc.

A specially treated cotton fabric of fine mesh. Keeps out all drafts, dust, rain and snow, but permits a constant circulation of fresh air. The frame is of hard wood, adjustable to fit any ordinary window opening.

No.	Price
937. 9 in. high, extends 23 to 37 in. wide,	\$ .50
949. 9 in. high, extends 29 to 49 in. wide,	.65
1537. 15 in. high, extends 23 to 37 in. wide,	.65
1539. 15 in. high, extends 29 to 49 in. wide,	.85

### HANDEE GARMENT HANGERS



No. 13. Hanger Sets (like cut).....	\$1.00
No. 13. Hanger only .....	.35
No. 2. Coat Hangers, each.....	.15



## "K. & W." Sanitary Sweeping Compound

Can be used on carpets, rugs, linoleums, mattings, tile and wood floors; is economical, non-inflammable, and absorbs the dust, thereby preventing the scattering of disease germs.

This powder is mixed by machinery only, and is composed of a special wood pulp combined with absorber and silica, which gives it its cleansing property. There is **no sand** used, the grit which is noticeable being silica. The oil of cedar, which is used as a disinfectant, is one of the best known to medical science. This powder always runs uniform, will cover a large area, and its use is recommended in every home, public building, store and factory.

### PRICE

50 pound keg .....	\$2.25
100 pound keg .....	3.75

Special quotations on large quantities

## O'Cedar Polish and Dustless Mop

The one perfect polish for pianos, automobiles, furniture, hard wood floors, and all waxed, varnished and polished surfaces, as it will not gum, and aside from its high lustre it is a dust allayer, a labor saver, and clean and sanitary in every particular.

PRICE O'CEDAR	4 oz. bottle .....	\$ .30; by mail, \$ .35
	12 oz. bottle .....	.60; " " .67
	Quart can .....	1.25; " " 1.35
	Half gallon can .....	2.00; " " 2.15
	One gallon can .....	3.00; " " 3.15

Price O'Cedar Mops, No. 3 (triangular), \$1.50; by mail, \$1.60; No. 4 (triangular), \$1.00; by mail, \$1.10; No. 17, 50c.; by mail, 60c.; No. 15, 75c.; by mail, 85c.

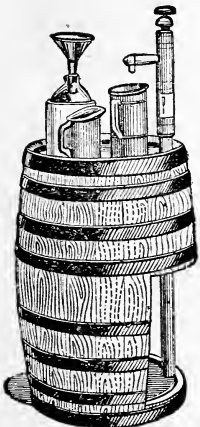


## Brooms, Brushes and Dusters and a Large Variety of Wooden Ware of All Kinds

20TH CENTURY

### Barrel Pump

FOR VINEGAR



Made from chemical-ized wood and is strictly non-corrodible; does away with the slow, leaky faucet; will pump the liquid at the slightest stroke of the piston.

Price, \$2.00

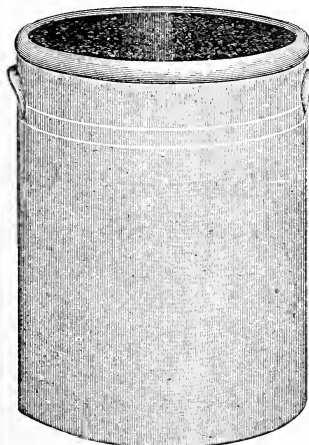
### Stone Ware

ALL SIZES OF

Stone Pork Barrels, Butter Pots,  
Bean Pots, Preserve Jars  
Jugs and Churns



Bean Pot



Pork Barrel

### BEAN POTS

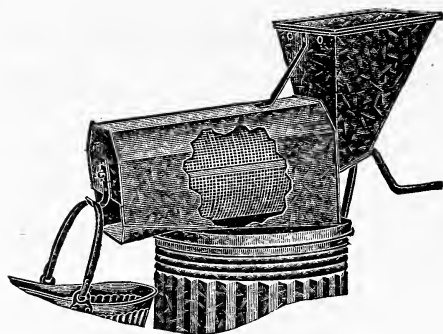
1 quart, \$ .35	4 quart, \$ .50
2 " .40	6 " .65
3 " .45	8 " .80

### BUTTER POTS WITH COVERS

1 gallon, \$ .45	4 gallon, \$1.25
2 " .70	5 " 1.60
3 " 1.00	6 " 2.00

### PORK BARRELS, NO COVER

8 gallon, \$2.25	25 gallon, \$7.25
10 " 2.75	30 " 8.50
12 " 3.25	35 " 17.00
15 " 4.00	40 " 20.00
20 " 6.50	50 " 25.00



THE NATIONAL

## The National Rotary Ash Sifter

In galvanized iron case. No dust. Works easily, quickly and well. Not only saves labor, but produces safety from fires.

Will fit 18-inch iron can or flour barrel.

Price, \$3.25

## The Favorite Ash Sifter

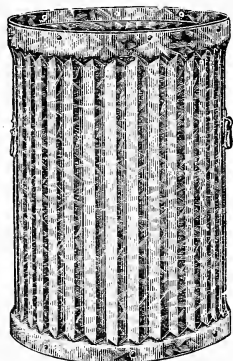
Wooden rim, with heavy wire bottom.

Price, 65 cents

## The "Lowell" Ash Sifter

This is an all wire sifter, sifting the ashes through the sides as well as the bottom.

Price, 90 cents

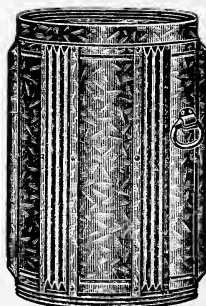


No. 0400

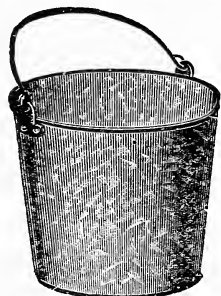
## Galvanized Iron Ash Barrels

Solid, heavy barrels. No danger from hot ashes.

Price, No. 0400, 17 x 26,	-	-	-	-	\$2.50
" " 0500, 18 x 26,	-	-	-	-	2.75
" " 0190, 18 x 26, ribbed,	-	-	-	-	3.50
" " 190, 18 x 26, extra heavy ribbed	-	-	-	-	5.00



No. 190



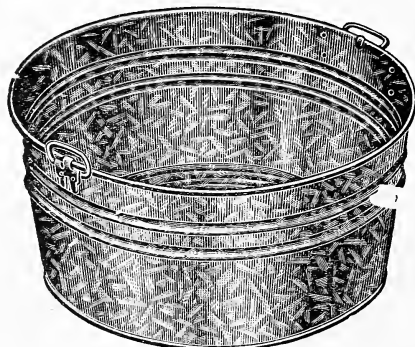
## Galvanized Iron Pails

10 quart,	\$ .40
12 "	.45
14 "	.50
16 "	.55
10 " extra heavy,	.70
12 " " "	.75
14 " " "	.80
16 " " "	.90

## Garbage Pails

MADE FROM  
GALVANIZED IRON

No. 29, 3¼ gal.,	\$ .85
No. 32, 6½ "	1.40
No. 33, 8½ "	1.60
No. 34, 9 "	1.85



## Galvanized Iron Tubs

With Wringer  
Attachment

No. 11,	\$1.05
" 22,	1.15
" 33,	1.35
A Keelers,	.65
B " "	.70
O " "	.85

## Galvanized Iron Coal Hods

No. 515,	\$ .55
" 516,	.60
" 517,	.65
" 518,	.85
" 156, heavy,	.85
" 166, " "	.90
" 176, " "	.95
" 183, " "	1.15



## Richmond "High Speed" Washer

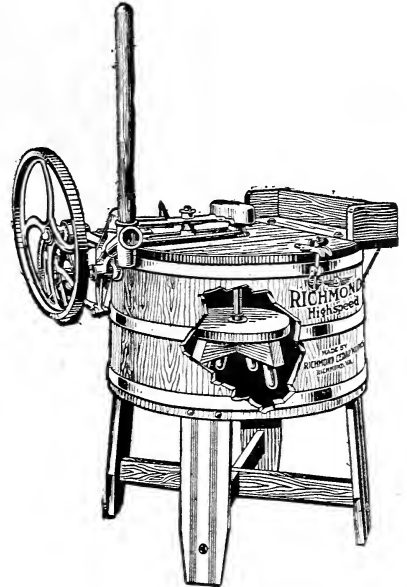
The tub is made of selected Virginia white cedar, the best wood known to man for resisting the action of water. Will not rot or become water-soaked, and will outlast several pine tubs such as are regularly used on other washing machines.

The hoops are heavy galvanized hoops, so strong they cannot break, and the tub being larger at the bottom they cannot fall off.

The dolly, with its smooth pins, turning back and forth, surges the clothes through the hot, soapy water against the corrugated sides and bottom of the tub, removing every particle of dirt.

The roller bearings and the large fly wheel make the High Speed so easy to turn that a ten-year-old child can run it and do a large washing in a short space of time.

Price, \$18.00

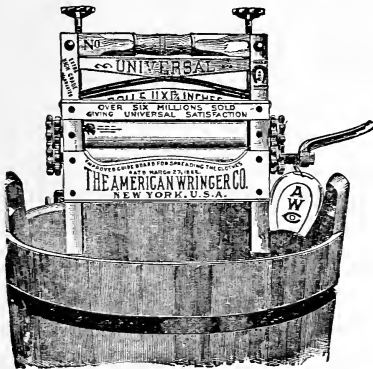


HIGH SPEED

## Majestic Rotary Washer

This is made of the same high grade materials as the above, and very similar in construction, but being turned direct by a handle on the fly wheel it does not work at so high a speed, although doing equally good work.

Price, \$14.00



## Clothes Wringers

### UNIVERSAL

Made either with regular bearings, ball bearings, or with enclosed gears.

### TUB WRINGERS

Universal

Rival

Superior

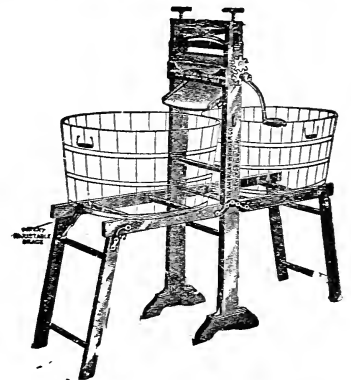
Daisy

### BENCH WRINGERS

Universal

Rival

Write for Prices



### FAMILY SIZE

All Wood

No. 2. Maple sides and front, birch back and bottom. For rag or cloth mops. The pioneer of Mop Wringers. Low priced and a big seller.



PRICE, \$2.25  
By mail, \$2.40

### FAMILY SIZE

"Can't Splash"

No. 14. Large family size for 8 to 16 oz. mops. Two piece, all galvanized 14 ga. steel.

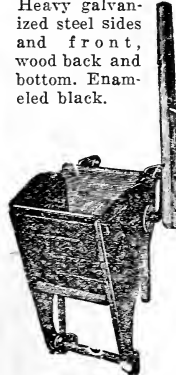


PRICE, \$3.50  
By mail, \$3.70

### JANITOR'S SIZE

"Can't Splash"

No. 1. Hotel size for 16 to 24 oz. mops. Heavy galvanized steel sides and front, wood back and bottom. Enamelled black.



PRICE, \$3.50  
By mail, \$3.70

## WHITE

## "Can't Splash"

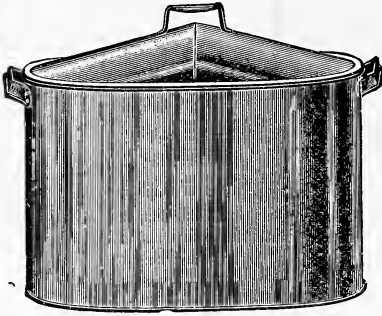
## Mop Wringers

Everyone responsible for keeping floors clean is a prospect for a White "Can't Splash" Mop Wringer. We all want to have clean floors, but no one enjoys wringing a dirty mop by hand. A White takes the drudgery out of mopping and makes it a pleasant task easily and quickly done.

The powerful 16 to 1 leverage converts a 25 pound pressure on the handle into a 400 pound squeeze on the mop. It wrings perfectly, easily, quickly, without lifting, twisting or turning. There is no crank or foot treadle to work and it cannot wear, tear or pull the mop apart.

It fits any pail, requires no fastening and is so simply and durably constructed that it lasts for years.

## Wash Boilers



8-in. X, tin bottom,	\$2.00	9-in. X, copper bottom,	\$2.50
9-in. X, tin bottom,	2.15	8-in. Rome, all copper,	4.75
8-in. X, copper bottom	2.25	9-in. Rome, all copper,	5.25

## Tea Kettles

NICKEL  
COPPER

Price

\$1.50

By mail

\$1.65

to

\$2.15

By mail

\$2.30



## Oil Cans



### PRICE

5-gallon Columbia .....	\$1.50
5-gallon Diamond, brass faucet.....	2.00
5-gallon Home Rule, pump can.....	2.25
5-gallon Economy, gasoline can.....	1.10
1-gallon Polo .....	.50
	By mail, .60
2-gallon Polo .....	.65
	By mail, .75

## "K. & W." Oil Tanks

For use where a considerable quantity of oil is kept. These tanks are fitted with a pump, and are safe, convenient and durable.

Price, 60-gallon tank,	-	-	-	\$12.50
110-gallon tank,	-	-	-	22.00

## Cotton Gloves

### PRICE

No. 14K, 14 oz. ....	30c.	per pair
No. 42K, 7½ oz. ....	25c.	" "
No. 12K, 9 oz. ....	25c.	" "
Jersey, No. 1 .....	25c.	" "
Jersey, No. 3 .....	25c.	" "
Gauntlet, leather palm, No. 18....	50c.	" "
Mittens, No. 320 .....	25c.	" "
Mittens, leather palm, No. 280.....	50c.	" "

By mail add 5c. per pair

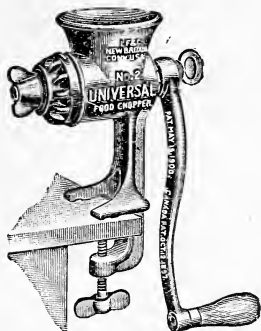
## Dinner Pails

Made from good quality polished tin, complete with pie tray and cup, with seamless outside cover.

Price, \$1.00 each  
By mail, \$1.15



## Universal Food Chopper

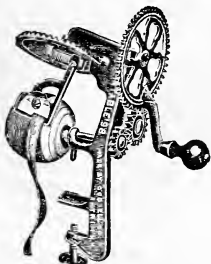


### NO. 2. MEDIUM FAMILY SIZE

Chops rapidly and without mashing, and in pieces as fine or coarse as wanted, all kinds of meat, fish, fruits, eggs, bread and vegetables.

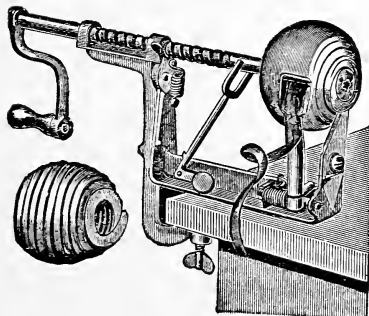
	PRICE	By Mail
No. 0 (capacity 1½ lbs. per min.),	\$1.85	\$2.00
No. 1 (capacity 2 lbs. per min.),	2.25	2.40
No. 2 (capacity 2½ lbs. per min.),	2.75	2.90
No. 3 (capacity 3 lbs. per min.),	3.50	3.65

## Apple Parers



NO. 98

Price, \$1.15; by mail, \$1.25



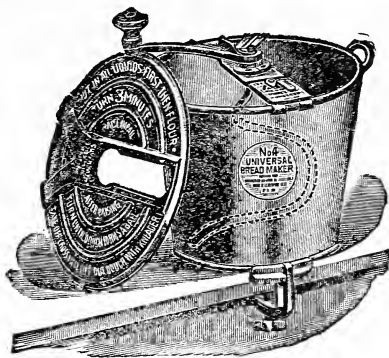
GENUINE WHITE MOUNTAIN PARER, CORER AND SLICER

Price, \$1.15; by mail, \$1.25

## The Universal Three-Minute Bread Maker

### Bread Maker, Mixer, Kneader and Raiser Combined

Made of heavy tin and sheet steel. All parts tinned. No housekeeper who has once used it will ever be content to go back to the old laborious, disagreeable way of making bread by hand. Very simple in construction. A child can operate it. As easily cleaned as a tin pail.

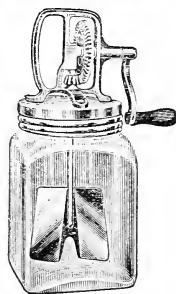


### PRICE

No. 2 (2 loaves),	\$2.50
By mail,	2.70
No. 4 (2 to 6 loaves),	3.00
By mail,	3.25
No. 8 (4 to 10 loaves),	4.00
By mail,	4.30

## Lightning Butter-Making Machine

Designed especially for the purpose of merging milk and butter, making about two pounds of table butter from one pound of butter and one pint of milk. This is accomplished easily and quickly by the peculiarly shaped metal dasher. The propeller-like motion creates a tremendous agitation, mixing the butter and milk thoroughly in about a minute. Being made entirely of metal and glass, this machine is easily and thoroughly cleaned, making it perfectly sanitary in every respect.



### PRICE

	By Mail
No. 1 (to make 1 lb. of butter),	\$1.50
No. 2 " " 2 " "	2.00
No. 3 " " 4 " "	2.50
No. 4 " " 6 " "	3.00

## "Pilgrim" and "Harder" Refrigerators and Ice Chests

Thoroughly constructed from hard wood and beautifully finished. Cleanable and perfectly sanitary. The economy of ice is a very important consideration, and the consumption of ice will be much smaller in our refrigerators than in many others, and at the same time insure a low and even temperature and perfect circulation of cold, dry air.



Send for  
Illustrated Catalog and  
Price List

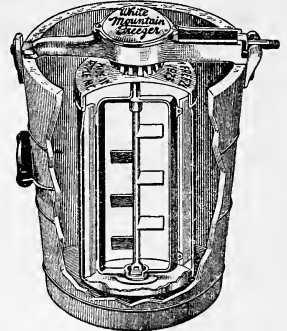


## Ice Cream Freezers

### "White Mountain"



The new design Triple Motion White Mountain Freezer embodies the very latest and most scientific construction in ice cream freezers. The tubs are of correct height to insure the smallest consumption of ice, and the cans of corresponding height to insure quick freezing. The special form of beater retains the famous triple motion. The new top frame construction eliminating all complicated gear mechanism makes a remarkably smooth and easily operated freezer.



#### PRICES

Junior,	\$2.00	3 quart,	\$4.50	8 quart,	\$ 9.00	15 quart,	\$16.00
1 quart,	3.25	4 "	5.50	10 "	12.00	20 "	20.75
2 "	3.75	6 "	7.00	12 "	14.35	25 "	25.60

## "White Mountain"

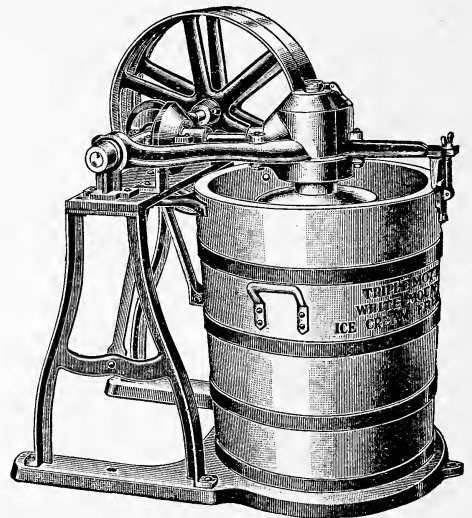
### Power Freezers

#### PLATFORM FREEZER

Sizes, 15, 20 and 25 quarts

The platform and stand are cast iron, painted to prevent rust. When in use, the gear frame is fastened by latch bolt and thumb screw; when released it can be swung to either side, so tub and can may be removed. Equipped with either pulley or fly wheel, a good power machine is produced. The pulley is  $15\frac{3}{4} \times 3\frac{1}{4}$ , and the freezer should be operated at a speed of one hundred and thirty-six revolutions per minute.

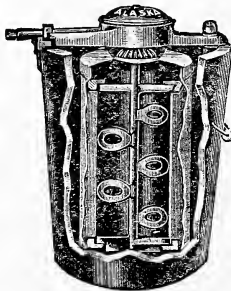
Prices on application.



## "Alaska"

The only freezer having the Perpetual Motion Aerating Spoon Dasher, with its spoon-shaped floats, open in the center like mixing spoons, which aerates, stirs and beats the mixture rapidly and thoroughly.

The cut also shows the new device attached to the under part of the gear frame or crossbar, which effectually protects the gearing and can cover from salt and ice.



#### PRICES

1 quart,	\$2.65	8 quart,	\$ 7.40
2 "	3.10	10 "	9.70
3 "	3.70	12 "	12.60
4 "	4.50	15 "	15.30
6 "	5.70	20 "	19.35

## Sampson Freezer

Sizes 25 and 40 quarts

This freezer is very similar to the Platform Freezer, but is of heavier construction. The pulleys on both sizes are  $24 \times 4\frac{1}{2}$  inches and should turn about seventy-five revolutions per minute to give the correct speed.

Price on application.

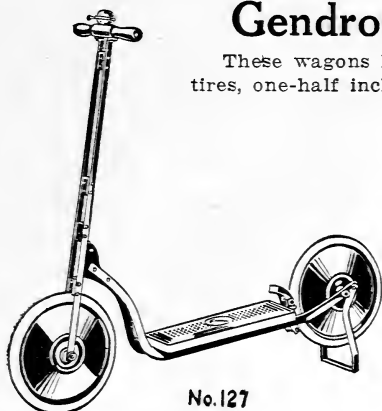
## Freezer Clamp or Holder

A perfect device for holding the freezer firm and steady. Easily adjusted to the tub by means of thumb nuts. Price, 2 to 10 quarts, 35 cents; 12 to 25 quarts, 55 cents.

An Illustrated Catalog of Power and Fly Wheel Freezers, Repairs, and Tubs and Cans for Packing Purposes furnished on application.

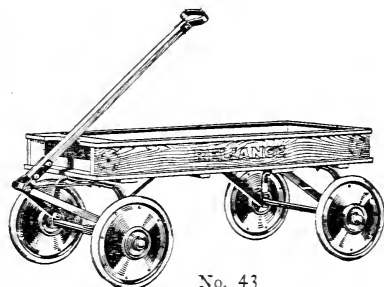
## Gendron Coaster Wagons and Scooters

These wagons have channel steel running gear, double disc wheels with rubber tires, one-half inch axles and are strongly braced.



No. 127

- No. 50. Body  $33\frac{3}{4} \times 14\frac{3}{4}$  in. All steel. \$7.75  
 No. 43. Body  $36 \times 16$  inch ..... 6.25  
 No. 02. Body  $24 \times 10\frac{1}{2}$  inch ..... 3.35  
 No. 01. Body  $28 \times 12$  inch ..... 4.25  
 No. 02 and No. 01 are made with wooden bolsters instead of channel steel.  
 No. 112. Scooter, 12 inch wheel, no brake.... \$4.00  
 No. 127. Scooter, 10 inch wheel, 1 in. tire, with foot brake ..... 4.55  
 No. 124. Scooter, 12 inch wheel,  $1\frac{1}{4}$  in. tire, hand brake ..... 7.00



No. 43

## Sleds

SPEEDSTER, SPEEDWAY, OXFORD

All with Flexible Runners

Clipper Sleds

Frame Sleds

Sled Boxes

## Skis

NORTHLAND AND OXFORD SKIS

Pine, Maple, Ash

4 Feet to 8 Feet

## Snowshoes

Men's

Ladies'

Children's

## Fruit Jar Rings Good Luck



Made just right for every kind of canning—hot pack, cold pack, or steam pressure. Indispensable for steam pressure work, as they stand long boiling and any temperature.

Made  $2\frac{1}{4}$  inch inside diameter by  $10/32$  flange cut  $12$  to the inch as approved by the U. S. Department of Agriculture. They fit all popular styles of fruit jars.

Manufactured from highest grade rubber, and attractively packed in handsome colored containers.

Per Doz., 10c. By mail, 12c.

## Parowax

for covering jelly. Per lb., 15 cents.

## Fruit Jars

Genuine "Lightning"

11 ounce, pint, 1 quart and 2 quart sizes

Easy-Seal ("E-Z")

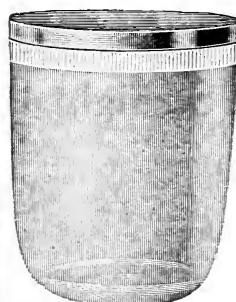
1-2 pint, pint, 1 quart and 2 quart sizes

Write for quotations

All Genuine "Lightning" Fruit Jars bear Trade-Mark "Lightning."



## Jelly Tumblers



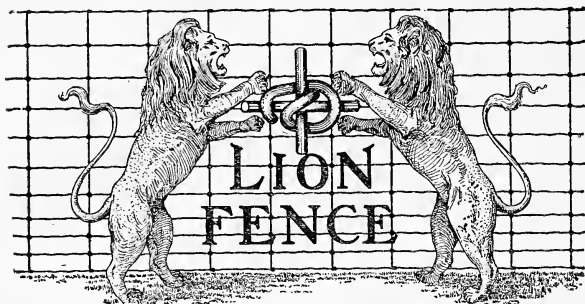
BEST  
QUALITY  
CLEAR  
GLASS

1-3 pints, packed,  
6 dozen to the case.  
27 dozen to the barrel.

# Page-Lion Fences

MADE BY

The OLDEST and BEST KNOWN FENCE COMPANY in the WORLD



A Full Line LION FENCE. All heights

Fences for Every Purpose, to Suit Every Condition.

Large, Heavily Galvanized Wires, Made from Open Hearth Steel.

Straight, Continuous Cross Wires. No Wraps or Welds.

The Best Fence for the Money

Best for Horses

Best for Cattle

Best for Sheep and Hogs

Best for Poultry

POULTRY	P	1848- 6	18 bars, 48 inches, 32 stays per rod.	Spaced, 1 ½ 1 ½ 1 ½ 1 ½ 2 2 2 2 ½ 3 3 ½
			4 4 4 ½ 5 5 inches.	
	P	2058- 6	20 bars, 58 inches, 32 stays per rod.	Spaced, 1 ½ 1 ½ 1 ½ 1 ½ 2 2 2 2 ½ 2 ½ 3
			3 ½ 4 4 4 ½ 5 5 5 inches.	
HOG	O	726- 6	7 bars, 26 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 inches.
	O	832- 6	8 bars, 32 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 6 ½ inches.
CATTLE	O	635-12	6 bars, 35 inches, 16 stays per rod.	Spaced, 6 6 7 8 8 inches.
	O	845-12	8 bars, 45 inches, 16 stays per rod.	Spaced, 4 5 6 6 7 8 8 inches.
	O	1047- 6	10 bars, 47 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 6 ½ 7 8 inches.
	S	1155-12	11 bars, 55 inches, 16 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 6 ½ 7 8 8 inches.

Write for quotations

## Excelsior Poultry and Rabbit Fence

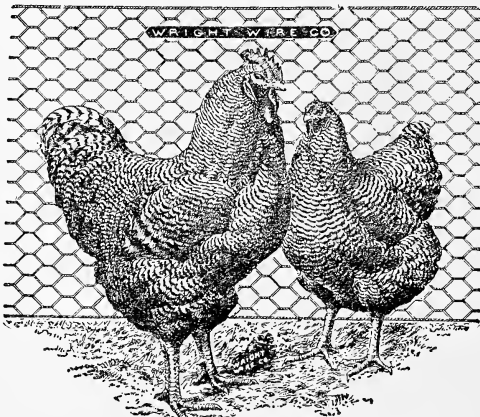
Similar to the Page fence, but of lighter wire. All wires are No. 19 gauge hard-drawn tough steel, standing the highest breaking strain used in any fencing. The selvages consist of double No. 19 wires.

## Galvanized Hex Mesh Poultry Netting

Made from No. 20 selected steel wire, galvanized after weaving. Made in 2-inch and 1-inch mesh, and of a superior, smooth finish.

This netting is put up in rolls containing 150 running feet each and in the following heights, 1 foot, 1 ½ feet, 2 feet, 3 feet, 4 feet, 5 feet, 6 feet.

Write for Prices



## W. S. Straight Line Poultry Fence

This type of fencing is used for exactly the same purposes as Hex Mesh Poultry Netting. As it is made with one set of wires running parallel it can be easily stretched between posts and can be used without rails or boards at top and bottom and does not sag. The horizontal wires are woven with a slight curve to allow for stretching in the process of erection and also to meet the contraction caused by weather. Galvanized after weaving.

Standard widths 12 inches to 72 inches inclusive, and standard length rolls of 150 linear feet each, in two sizes only, 2-inch mesh and 1-inch mesh. The 2-inch mesh is made from No. 18 horizontal wires and No. 20 cross wires; the 1-inch mesh from No. 19 horizontal wires and No. 21 cross wires.

Write for Prices

# The Standard Cyphers Incubator

## Hot Air Incubators Made in One Style---Four Different Sizes

No. 0, 70 egg, - - - - \$33.00  
 No. 1, 144 egg, - - - - 42.00

No. 2, 244 egg, - - - - \$56.00  
 No. 3, 390 egg, - - - - 69.00

You can travel from Maine to California, and from Alaska to Florida—throughout the world, for that matter—and wherever you find successful poultry keepers you will find the Standard Cyphers.

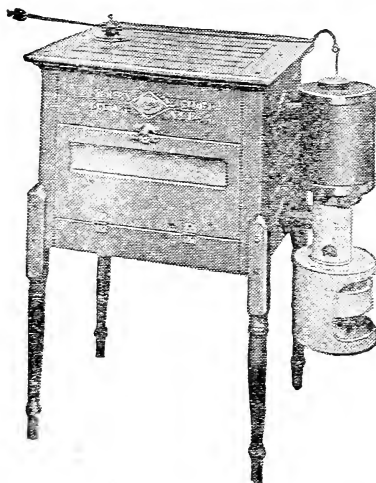
The Standard Cyphers meets every practical demand that can be made upon it. Of course, it can't be sold at an extremely low price. It costs more in the factory than a good many machines retail for, and you can depend upon it that every added cent of cost is put there because it is needed; because this great incubator cannot be produced without it.

Remember—none of the cost of the Standard Cyphers Incubator goes to pay for ornaments, fancy hardware or unnecessary parts. It is a plain, substantial, durable machine for hatching eggs—just that and nothing more. It is **chock-full** of incubator efficiency and it is sold as low as that kind of an incubator can be sold.

If you are considering poultry raising as a money-making business, the price you pay for an incubator is of secondary importance. The incubator that brings out strong, vigorous, livable chicks and that can be depended upon to take care of itself to the fullest extent—such an incubator is **cheap** at any price.

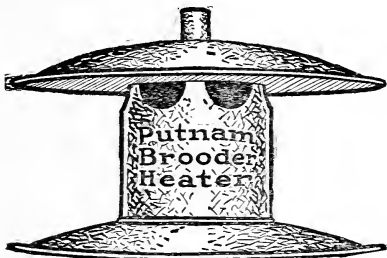
And yet the Standard Cyphers costs only a little, if any, more than inferior machines of the same capacity.

Write for descriptive catalog.



**STANDARD CYPHERS INCUBATOR**  
 (Made in four sizes)

Illustration shows No. 1 Incubator,  
 having 144 egg capacity



**THE BROODER HEATER**

## Putnam Brooder Heater

By using this heater one can make at home a brooder suitable for from 35 to 60 chicks at very little expense. The materials used to make it are one shoe box, one-sixth yard of oilcloth and one Putnam Brooder Heater. A 14-year-old boy can build one in an hour with no tools but saw and hammer. This brooder will accommodate from 25 to 60 chicks and will take better care of them than any brooder made, no matter how elaborate or expensive. The heater requires filling but once a week and no further attention in the meantime. Guaranteed to give satisfaction.

Price only \$4.75 postpaid

## Little Putnam Stove

This stove may be used with any style poultry fountain to warm the water in cold weather. It is made of galvanized iron, is nine inches in diameter and four inches high. The oil tank holds oil enough to burn three weeks without refilling. It is fireproof and non-explosive, and if tipped over will go out.

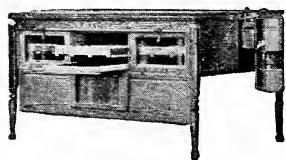
Price, \$1.95 postpaid



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Queen Incubators

The "Queen" is an Incubator Built Upon Principle and Common Sense



	PRICE					
No. 2, 135 eggs,	-	-	-	-	-	\$ 37.50
No. 3, 180 eggs,	-	-	-	-	-	44.50
No. 4, 275 eggs,	-	-	-	-	-	57.75
No. 5, 400 eggs,	-	-	-	-	-	68.00
No. 25, 600 eggs,	-	-	-	-	-	103.00
No. 35, 800 eggs,	-	-	-	-	-	132.00
No. 45, 1000 eggs,	-	-	-	-	-	157.00

## Electric Attachment for Queen Incubators

### PRICES

All sizes up to No. 25,	-	-	-	\$20.00	No. 25, No. 35, No. 45,	-	-	-	\$22.50
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## Egg Turning Trays

These can be furnished if desired. The 30-in. tray, price \$5.00, fits Nos. 4, 5, 25 and 35. The 40-in. tray, price \$7.50, fits No. 45.

## Self-Supporting Egg Trays

It is expensive to have a tray of eggs slip out and drop to the floor. This cannot happen with a Queen. It has self-supporting egg trays. Most of the cheap machines have no protection.

## Proper Insulation

The Queen is doubly insulated. First, we use double walls of California redwood, forming a dead air space. Second, corrugated strawboard is used between the wooden walls. Proper insulation adds considerable expense to the manufacturing cost. However, it is an absolute requirement of a good incubator.

## Queen Hot Water Heating

The Queen system of hot water heating prevents the drying out tendencies found in hot air incubators and provides a soft, uniform heat over every part of the egg chamber—a heat that is most natural for the hatching eggs. When it becomes necessary for you to remove the lamp, the heated water circulating through the radiator maintains an even heat within the egg chamber without the slightest variation, while, should the lamp be forgotten, the heat stored in the water will keep the eggs warm for many hours. Hot water is admittedly the best heat for incubators.

The radiator and boiler of the Queen heating system is made of copper (not copperized tin) that has been rolled into sheets without heating, which gives added life, strength and ability to stand more wear and tear than the ordinary sheet copper, and is placed close to the inner top of the incubator. This form of placing allows the heat to reflect from the floor of the egg chamber and to more evenly affect the germ which always rises to the upper surface of the yolk.

## Why We Use Redwood

California redwood is conceded by all to be the best wood for incubator construction, as it will not warp, split, nor absorb moistures or odors during use. It is a wood that insects seldom attack, because of an acid element the lumber contains, and, being free from pitch, offers strong resistance to fire.

## Special Heat Regulation

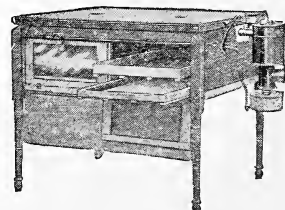
This is a vital factor in incubation, for an incubator must not only be supplied with heat, but it must have exactly the required amount at all stages of the hatching period. In other words, the source of heat must be self-regulating and sure.

The manufacturers of the Queen have designed and patented a regulator especially for the Queen, with which they guarantee a regulation to within a small fraction of a degree.

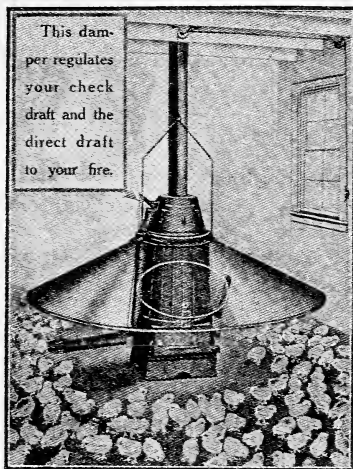
## Style K

This line was gotten out to supply a demand for a moderate priced machine for those who do not feel they can afford a Standard Queen and is superior to any machine of its class. It is constructed of redwood, has copper heating system, regular Queen regulator, but having no air space between the double walls is more easily affected by extremes of temperature than the Standard Queen.

No. 22, 220 eggs,	-	-	-	-	-	\$36.50
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## Queen Brooders



The Queen Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the Queen. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located at the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

As will be seen from the illustration, the check and draft lids are cast together and operated together. Thus, when the fire is too hot, the wafer expands and closes the draft and opens the check, both at the same time. When it is too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

### SUPERIOR QUEEN GRATE

The grate in the Queen stove is the rocker type and strikes the fire at four points. This is far superior to any draw center or shaker grate because it cleans the fire thoroughly, and by striking at four points will break up and remove all clinkers.

### COLLAPSIBLE HOVER

The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. This hover comes knocked down, with holes punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing, and lessens the danger of damage when not in use.

### BURNS ANY KIND OF FUEL

The Queen stove burns any kind of fuel with equally satisfactory results. We recommend chest-nut sizes in all kinds of fuel, and hard or soft coal, coke, charcoal or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as the others, but it will give no better heat.

- No. 1—600 chick size, 42 in. hover, \$21.50—With 10 ft. pipe, cap, and damper, \$23.00  
 No. 2—1200 chick size, 52 in. hover, 26.50—With 10 ft. pipe, cap, and damper, 28.25  
 No. 3—1600 chick size, 60 in. hover, 31.50—With 10 ft. pipe, cap, and damper, 36.00

## Wishbone Brooders

### Valveless, Oil-Burning, Blue-Flame

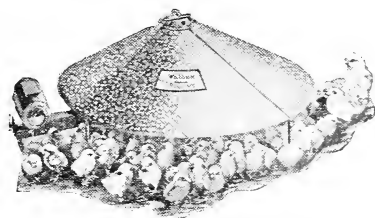
The Wishbone has been enthusiastically welcomed by poultrymen all over the country. They appreciate the fact that it is the most satisfactory brooder ever marketed. The Wishbone Valveless Brooder is as simple to operate as a good cook stove. It consists of only four main parts—the tank, the burner, the oil pipe and the hover.

When you want to light the brooder you turn the adjusting handle and touch a match to the burner. A hot, blue flame shoots right up. No priming. No pre-heating.

The oil flows down the big half-inch oil pipe as surely and continuously as it would flow through a funnel. And there isn't a valve or thermostat or strainer in the entire brooder to go wrong or start trouble. The Wishbone is the only valveless brooder.

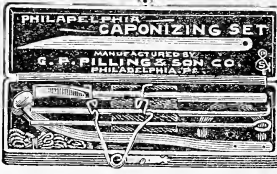
### What It Costs

No. 22—50-100 chicks (with 22-inch canopy),	\$12.00
No. 32—350 chicks (with 32-inch canopy),	16.00
No. 42—500 chicks (with 42-inch canopy),	19.00
No. 52—1000 chicks (with 52-inch canopy),	22.00





## The Philadelphia Caponizing Set



There is no doubt as to the advantages of caponizing. The operation is very simple, and with a "Philadelphia" Caponizing Set, it can be performed with safety and thoroughness.

Price, per set, \$3.00. By mail, \$3.05.

## X-Ray Egg Tester

Is made of galvanized iron and consists of a central cylinder or lamp flue  $5\frac{1}{4}$  inches high, with an outside diameter of  $2\frac{3}{8}$  inches at the base and  $2\frac{1}{8}$  inches at the top. It is designed for use on an ordinary hand lamp, and fits



X-Ray Egg Tester

over any style of burner with a diameter approximating that of the tester.

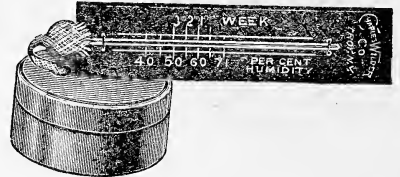
Price, 40 cents; postpaid, 45 cents

## Wilder Moisture Gauge for Incubators

This instrument is designed to meet the demand of the practical poultryman for a simple, direct reading gauge which will enable him to keep the amount of moisture in his incubator as near as possible to a desired point.

By noting the position of the mercury column, the operator can tell at a glance whether to increase or decrease this amount.

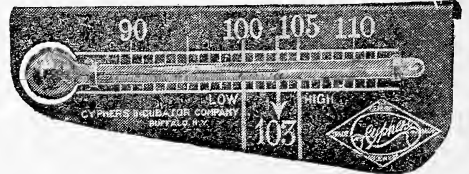
Price, \$1.25. By mail, \$1.30



## High Grade Tested Thermometers

The price of incubator thermometers does not include the wire hanger. Wire hangers will be supplied at ten cents extra for each thermometer. In ordering wire hangers, be sure to state size of your incubator and year manufactured. If machine has no packer's slip bearing date of manufacture, send description of machine. This is important.

When ordering brooder thermometers, name the style of brooder in which it is intended to be used.



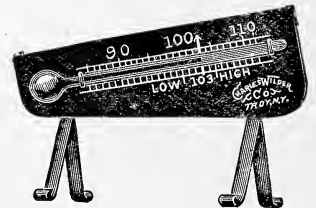
Cyphers Incubator Thermometer

Price, 75 cents. By mail, 80 cents

## Wilder Thermometer

Illustration shows the thermometer with legs unfolded. Easy to see, and may be quickly placed in any part of egg tray. Accurate to the smallest degree.

Price, 75 cents. By mail, 80 cents



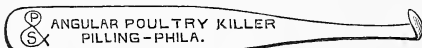
Brooder

Thermometer

Price, 75 cents



FRENCH POULTRY KILLING KNIFE



ANGULAR POULTRY KILLING KNIFE

## Poultry Killing Knives

Every poultry raiser should have one of our killing knives. They are made of finely tempered instrument steel, with nickeled handle. Sent, postpaid, on receipt of price.

Angle blade, 50c.; French, straight blade, 50c. By mail, 55c.



Russell. No. 323

65c. each

By mail, 70c.

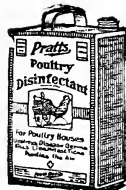
# POULTRY HEALTH MEANS PROFIT

## Cleanliness Means Poultry Health **Pratts Poultry Disinfectant**



Insures poultry health. A cheap, powerful, non-poisonous disinfectant. A gallon makes a barrel of disinfecting solution. Use it freely. Spray it about the poultry houses, roosts, dropping boards, nests and wherever a strong disinfectant is needed. Acts as a deodorizer, germicide, and liquid lice killer. Effective in the treatment of roup, colds and contagious diseases.

1 qt. 55c.; 2 qts. 90c.; 1 gallon \$1.50.



## **Pratts Roup Remedy** (Tablets or Powder)

Use it as a treatment or preventive. An easy powerful remedy with a long record of success in the treatment of colds, roup, diphtheria, catarrh, etc. Keep a box always at hand, guaranteed to give satisfaction.

25c. and 50c. pkgs.



## **Pratts White Diarrhea Remedy**

Use this in the chicks drinking water for the first ten days and you will avoid losses from white diarrhea and like bowel troubles. This is "life insurance" for chicks that will save you dollars. Very easy to use and fully guaranteed.

25c. and 50c. pkgs.

## **Pratts Sore Head Chicken Pox Remedy**

A safe, sure and powerful remedy that will prevent as well as cure this disease. Tones up the system, heals the sores and prevents spread of the disease. Easy to use, you should always keep a package in your chest so you can treat your hens promptly. It may mean saving your flock.

30c. and 60c. per pkg.



## **Pratts Red Mite Special**

is a powerful preparation put up specially to rid flocks of red mites, ticks, blue bugs, fleas and like blood sucking vermin. It should be sprayed or painted on the roosts, dropping boards, nest boxes, and in all cracks. One application is effective for months. Many times more powerful and effective than ordinary liquid lice killers.

1 quart 50c.; 1/2 gallon 90c.; 1 gallon \$1.50.



## **Pratts Scaly Leg Ointment**

A simple, strong, guaranteed ointment, easy to apply, that will quickly cure the most stubborn case of scaly leg. Don't have lame birds that don't lay, use this ointment and have a healthy flock.

30c. and 60c. per can.

## **Head Lice Ointment**

Rub a little of this special ointment on the head and under the wings of each little chick and you will not only avoid losses from head lice but also have stronger, healthier chicks.



## **Here's What Pratt's Guarantee Means**

Pratts are the oldest and largest manufacturers of stock and poultry preparations in America. They have had over half a century's experience and their remedies have been in successful world-wide use on the largest and smallest flocks and herds. Therefore every Pratt Remedy is guaranteed to give satisfaction or your money will be refunded.

# **Pratts**



## HANDY CHART OF POULTRY DISEASES

### **BRAIN—Congestion of**

Dizziness  
Staggering  
Twisting head  
Use Pratts Poultry Regulator.

### **BRONCHITIS**

Difficult breathing  
Whistling or rattling in throat  
Use Pratts Bronchitis Tablets.

### **CANKER**

Cheesy patches in throat  
Use Pratts Poultry Disinfectant.

### **CHICKEN POX or "SOREHEAD"**

Scabs or sores on head and comb  
Use Pratts Sore-head Chicken Pox Preparation.

### **"CHOLERA"**

A term applied to bowel and digestive troubles  
Use Pratts Special Compound.

### **COLDS**

Watery or swollen eyes  
Nasal discharge  
Sneezing  
Use Pratts Roup Tablets.

### **DEPLUMING MITE**

Patches bare of feathers  
Use Pratts Lice Salve.

### **DIPHTHERIA**

Similar to roup  
Gray patches in throat  
Fever  
Use Roup Tablets.

### **DIARRHEA**

Use Pratts Special Compound.

### **GAPES (in chicks)**

Gasping, choking, coughing  
Red, thread like worms in windpipe  
Use Pratts Gape Compound.

### **INDIGESTION**

Watering at mouth  
Darkened comb  
Use Pratts Special Compound.

### **LEG WEAKNESS (in chicks)**

Too high brooder-heat  
Improper food  
Use Pratts Baby Chick Food.

### **LIVER DISEASES**

Listlessness  
Darkened comb  
Use Pratts Poultry Regulator

### **"PASTING UP" (in chicks)**

Chilling  
Improper feeding  
Use Pratts Baby Chick Food.

### **"PIP"**

Cough  
Hardened tongue  
Use Pratts Condition Tablets.

### **RHEUMATISM**

Lameness  
Swollen joints  
Use Pratts Liniment.

### **ROUP**

Nasal discharge  
Foul odor  
Swollen eyes and face  
Use Pratts Roup Tablets.

### **SCALY LEGS**

Scaly, rough legs  
Use Pratts "Scaly" Leg Ointment.

### **VENT GLEET**

Sore vent  
Offensive discharge  
Use Pratts Poultry Disinfectant.

### **WHITE DIARRHEA (in chicks)**

Sleepy, droopy  
Short backs, long heads  
Use Pratts White Diarrhea Tablets.

### **LICE**

Restless, picking  
Shaking heads  
Unthriftiness  
Use Pratts Powdered Lice Killer or Pratts Lice Ointment.

### **RED MITES**

Pale combs, weakness  
Loss of weight  
Use Pratts Red Mite Special.



# BABY FOOD FOR BABY CHICKS



A dozen years ago old chick raising methods were revolutionized by the introduction of

***Pratt's***

## Buttermilk Baby Chick Food

the original "baby food for baby chicks." As a result it is today possible to raise every liveable chick by using this splendid feed for the first three or four weeks of a chick's life. That is the critical period when the use of Pratt's Buttermilk Baby Chick Food will more than pay for itself in the extra chicks you save.

Pratt's Buttermilk Baby Chick Food is made of the most carefully selected, high grade ingredients skillfully prepared so that it is mechanically predigested. It furnishes everything needed for health, growth and a sturdy foundation. Leg weakness, diarrhea and other chick troubles are unknown where Pratt's is used.

Don't waste time, chicks or money on imitations of Pratt's. We guarantee it will give complete satisfaction. In 25c. and 50c. pkgs. and in 10, 14, 25, 50 and 100 lb. bags.

***Pratt's***

## Buttermilk Baby Chick Food

"Life Insurance for Chicks"

# PRATTS PREPARATIONS MEAN HEALTH



## For Health and Eggs **Pratts, Poultry Regulator**

has no equal. It is the world's original poultry regulator and has been the standard for over 50 years. Not a dope or stimulant but a natural tonic supplying numerous health necessities required by heavy laying hens and breeding stock. Tones up the system, regulates bowels, aids digestion, sharpens appetite, wards off disease and increases vitality. Added to any mash it makes more eggs. Use it the year round and make bigger profits. Guaranteed to give satisfaction or your money back. 25c., 50c. and \$1.00 pkgs. 12 lb. pail \$1.65; 25 lb. pail \$3.00; 50 lb. drum \$5.50; 100 lb. drum \$10.00.



## **Pratts,** Gape Compound

made in two forms for either external or internal use. Equally effective and a safe and quick remedy for gapes in chicks. Use it as a preventive and avoid heavy losses from this trouble. Fully guaranteed. 25c. and 50c. pkgs.



## **Pratts,** Condition Tablets

Not only for show birds but for all fowls that are out of condition and need toning up. Valuable for treating individual birds that are "off their feed." Efficient in treating colds, liver and digestive troubles. Always keep a box at hand. 25c. and 50c. per pkg.

## **Pratts,** Bronchitis Tablets

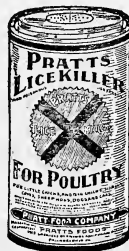
afford quick relief for wheezing, rattling and whistling in the throat. Keep a box on hand and prevent further trouble or losses. 25c. and 50c. per box.



## **Pratts,** Powdered Lice Killer

A powerful and economical lice killer that quickly rids your fowls of these profit eating pests. Use it on the poultry, in the nests and dust boxes, etc. Also used to free horses, cows, sheep, dogs, cats, etc., from lice, fleas and other vermin. Easy, safe and effective to the highest degree.

In handy sifter top cans 25c. and 50c.



## Have a Poultry Medicine Chest

and in it keep a supply of remedies that will enable you to treat disease just as soon as you notice it. A few hours delay may lose you valuable fowls. Pratt's Poultry Remedies are guaranteed, so keeping a supply on hand is cheap health insurance for your fowls.

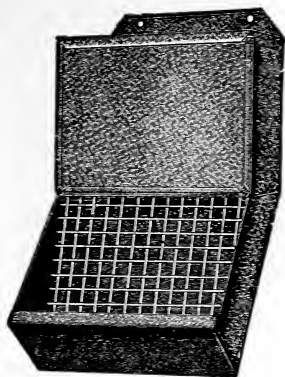
# **Pratts,**

## **Pratts,** Special Compound

For all sorts of digestive troubles commonly known as "cholera," such as indigestion, diarrhea, sour crop, dysentery, etc. this remedy offers a safe, sure and quick relief. Can be used as a preventive as well as remedy. Always have a package in your poultry medicine chest. 25c. and 50c. per pkg.



## Sexton Dry Feed Hopper



OPEN

This hopper is arranged to hang on the wall the desired distance from the floor and never need be removed from the wall to be refilled. It is impossible to waste any feed, as the pan at the bottom takes any feed that may be picked out, and the last crumb can be used, therefore saving any waste. The body being covered keeps feed dustproof and clean, and is always dry. Body made of galvanized iron and the grating is of round galvanized wire, preventing the poultry from cutting their bills. The lower cover is so arranged that it is held up by locking the top cover of hopper over same, and by raising the top cover the lower cover will fall in place. Simple in construction, easily operated and absolutely "rat" and "mouse" proof. Made in three sizes.

	PRICE	By Mail	
No. 5, 24 quarts capacity,	\$2.65	\$2.90	
No. 1, 12 quarts capacity,	1.50	1.65	
No. 2, 3 quarts capacity,	1.10	1.22	



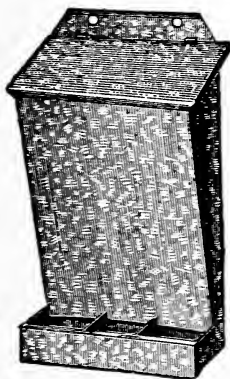
CLOSED

## Norwich Automatic Feeder

"FILL THE HOPPER AND THE BIRDS DO THE REST"

Fill the hopper with any dry grain feed, or any mixture of dry grain feed, and the revolving bait bar with cracked corn. Stand the Norwich Automatic Feeder anywhere in the yard, pen or house, and put any kind of litter under machine. Adjust valve to feed desired quantity. Adjust legs for required height. Every kernel of grain put in the hopper will go to the flock. Nothing will be lost from any cause. The exercise given by the action of the machine is just sufficient to keep the flock in perfect condition; a few days' trial will show the breeder that the flock will be bright and alert, and with a total absence of dull, stupid or drooping appearance.

Price—No. 1, 8-quart hopper, weight 14 lbs.	\$5.00
No. 2, 14-quart hopper, weight 15 lbs.	5.50
No. 3, 20-quart hopper, weight 20 lbs.	6.50

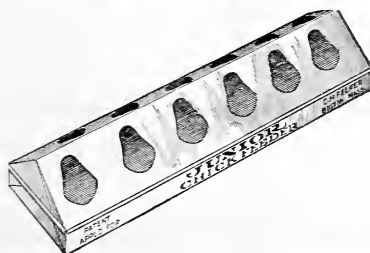


## Grit and Shell Box

Made of best grade galvanized iron, in two sizes. Has three compartments, for grit, oyster shell and charcoal. Cover lid on a slant prevents fowls roosting on the box and keeps contents clean.

	Price	By Mail	
Small,	\$1.00	\$1.12	
Large,	1.15	1.30	

## Junior Chick Feeder



Can be used either for dry feed or for water. Easily cleaned and so made that the chicks cannot soil the feed.

	Price
10 in.,	\$ .25
By mail,	.30
20 in.,	.40
By mail,	.48

## Leader Fountain

This new fountain is one of the most popular fountains on our list. It is made in two sections like the Duplex so as to be easily cleaned but is less expensive.

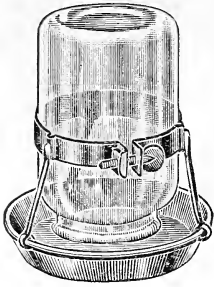


	Price
1½ gal. size	\$.85
By mail,	.95
3 gal. size,	1.50
By mail,	1.65

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



## Poultry Drinking Fountains



### FELKER'S Handy Attachment

For Any Make Fruit Jar

A Perfect Feeder for Sour Milk, Water, Hard Grain or Grit

The container, of aluminum, is rust-proof and non-corroding.

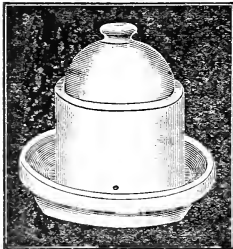
Price, 25c.; by mail, 30c.

### The Peerless Fountain

Protected from dirt and filth. The fowl cannot injure their combs while drinking. Easy to clean and fill. Made of heavy galvanized iron. Durable and practical.

#### PRICE

10 quart size, \$1.25; by mail, \$1.35  
5 quart size, .90; " " 1.00  
Chick size, .35; " " .40



### Stone Fountain

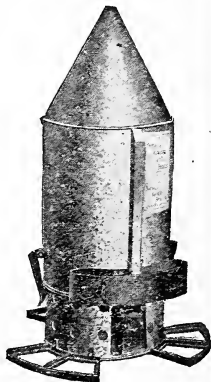
#### PRICE

1/4 gallon.....	\$ .40
By mail,	.52
1/2 gallon.....	.45
By mail,	.63
1 gallon.....	.55
By mail,	.75
2 gallon.....	.75
By mail,	1.00

### The Norwich Automatic Air-Lock Fountain

The most perfect device ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is a physical and absolute impossibility to contaminate or pollute the water supply, and requires cleaning about once in three months only. Is practically frost proof. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5 gallons capacity.



#### PRICE

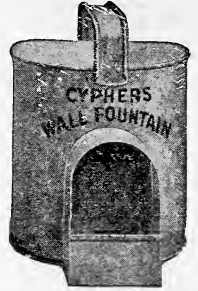
Complete with burner base..... \$6.00

### Wall Fountain

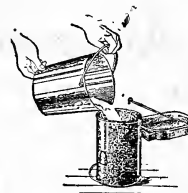
A galvanized iron hood keeps dirt from dropping into the water, yet allows fowls to drink readily. They are convenient to handle and are so made that they can be hung on the wall above the floor.

#### PRICE

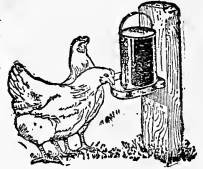
1 gallon .....	\$ .90
By mail,	1.00
2 gallons .....	1.25
By mail,	1.35



### The Keystone Fountain



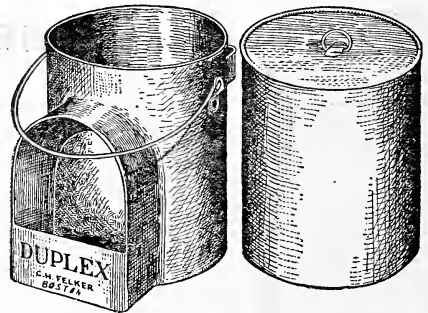
Owing to the round bottom, which is hinged to the top and locks into place so that it cannot drop off, this is a fountain especially easy to keep clean. Galvanized after being made.



#### PRICE

	By Mail		By Mail
1 quart, \$ .55	.62	1 gallon, \$1.00	\$1.10
2 quarts, .75	.83	2 gallons, 1.50	1.60

### The Duplex Fountain



Top section slides into bottom section

The latest and most practical sanitary fountain on the market. This is a double fount. Keeps the water clean and pure. Easy to fill; easy to care for. Made in two sizes.

#### PRICE

1 gallon .....	\$1.15	2 gallons .....	\$1.40
By mail,	1.25	By mail,	1.50

### The Two-Pen Duplex Fountain

Made like the Duplex, with the exception of having two openings for the fowls to drink.

#### PRICE

2 gallons .....	\$1.65	5 gallons .....	\$3.25
By mail,	1.75	By mail,	3.40

# Ideal Sanitary Poultry Drinking Fountains



The simplest, handiest and most practical fountain made. Keeps water the right temperature all the year. Has no lamps to trim and valves to get out of order. Saves time, labor and worry, and costs nothing to run. The open pan or drinking fountain gave to poultry only stale or filthy water, which was too warm in summer and too cold in winter. These conditions led to devising a fountain in which water could be kept **pure** and **clean** and of desired temperature in any climate.

The fountain is made of galvanized iron, and is similar in construction to the fireless cooker, being packed with a non-conducting material to retain the temperature of the water.

Size	Extreme Height	Diameter	Weight	Price	By Mail
2 gallon	15½ inches	13 inches	15 pounds	\$3.50	\$3.75
3 gallon	17 inches	14 inches	20 pounds	4.00	4.30
5 gallon	20 inches	16 inches	25 pounds	5.00	5.35

## Moe's Wall Fountain, No. 74

A large capacity fountain, holding 5 gallons, made of heavy galvanized iron. Similar in style to the Peerless fountain.

Price, \$1.95. By Mail, \$2.05

## Felker's Insulated Duplex Sanitary Poultry Fountains

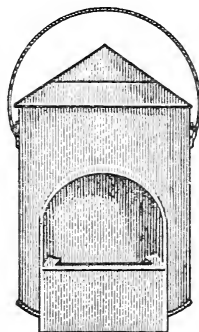
The "Insulated Duplex" is unquestionably a big step forward in the development of poultry drinking fountains.

Its construction makes it as handy to clean as a common pail. The top or inside container slides into the bottom section or base, and can be removed without inconvenience at a moment's notice. The water is kept pure and clear at all times.

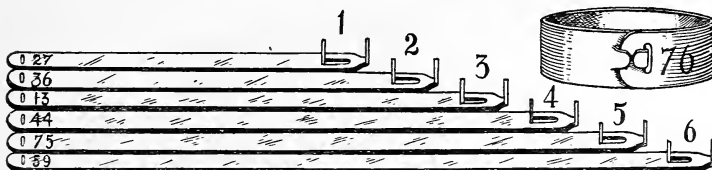
The extra large opening, or drinking trough, which this fountain carries makes it easy of access to a number of fowls at the same time.

An entirely new and improved method of insulation enables this fountain to keep water at an even temperature the coldest day of winter and the hottest day of summer. It will not freeze.

Price, 3 gallons, \$4.50; by mail, \$4.80. 4 gallons, \$5.00; by mail, \$5.35



## Leg Bands for Poultry and Pigeons



**DOUBLE CLINCH LEG BANDS** POULTRY SIZES CUTS SHOW EXACT LENGTH

### Double Clinch Leg Bands

#### A BIG SELLER

Made of aluminum, with large raised numbers

These bands are neat, easily applied, and cannot come off by accident.

In ordering state what breed they are for, and what letters or numbers you wish put on them. No. 3 is the size most generally used for poultry.

Stock constantly on hand, packed in boxes of 100, numbering from 1 to 100.

Price, 85 cents per hundred.

Special price for 1000.

## Colored Spiral Celluloid Leg Bands



Will identify birds as far as one can distinguish colors. Indestructible and can be slipped on and off like a key ring.

Red, white, blue, amber, green, black, pink, ruby.

Price, 75 cents per hundred, postpaid.

## Leader Leg Bands

These are flat, colored aluminum bands with the figures in black on the colored ground, and are adjustable to any size fowl.

Price, \$1.25 per hundred, postpaid.



## Bandettes

(Reg. Trade Mark)

**THE WORLD'S BEST LEG BAND**  
Most Practical,  
Simple, Neat

Bandettes are easily applied single handed, simply open out Bandette, hook it on leg, and allow it to close around the bird's leg; should not fit tight. We make two sizes: No. 9 for Leghorns, and No. 11 for Rocks, Reds, etc. Bandettes are made in 5 colors: Blue, Red, Yellow, Green, Pink.

Bandettes are sold only in unbroken sets of 25 in one color: 1-25, 26-50, 51-75, 76-100, and so on.

Price, 20c. per doz.; \$1.50 per 100.

# Jamesway Makes Poultry Pay

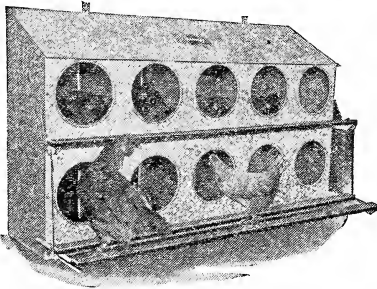
## Baby Chick Waterer



Built of heavy steel sheets. Easily washed and thoroughly cleaned by removing water pan below. Pan detachable for cleaning and filling. Capacity,  $1\frac{1}{2}$  gallons for 100 chicks or less for twenty-four hours.

Price, \$1.25. By Mail, \$1.35.

## Self-Cleaning Nests



Built of steel sheets with inclined top, preventing hens from roosting above. Back of nest open, making cleaning easy. No harboring place for lice. Perches swing up against face of nest section. Made in 3, 6, 10 nest sections, with  $9\frac{1}{4}$  inch hole.

Prices—3 nest size, \$5.00; 6 nest size, \$8.25;  
10 nest size, \$11.50.

Traps for nests, 40 cents extra each.

## Other Jamesway Supplies

### WALL FEEDERS

With perch and feed-saver pan.  
Prices—19-inch, \$4.80; 35-inch, \$6.50.

### DROPPING BOARD SCRAPER

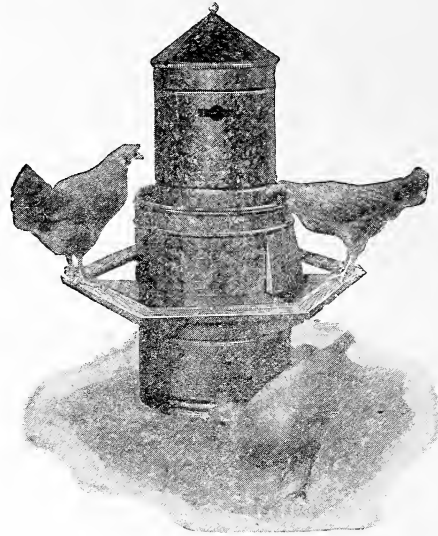
Blade 18-inch x 6-inch, \$1.25.

### NO WASTE CHICK FEEDER

For 200 baby chicks, \$7.50.

## Gravity Waterer

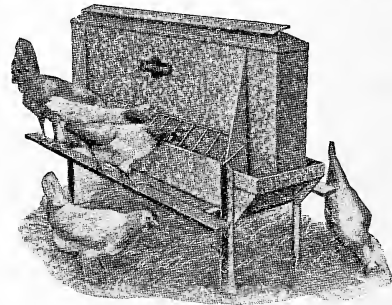
(8 Gallon)



The drinking pan extends all the way around the waterer, providing room for from 12 to 15 hens to drink at a time. Lamp burns for one hundred hours without refilling.

Price—With stand, \$9.40; without stand, \$7.90.

## Free-Feed Hen Cafeteria



### SAVES FEED

A feed-saver pan fitted below the feeding trough on either side catches all feed thrown out by the hens.

### SAVES TIME

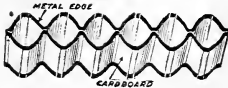
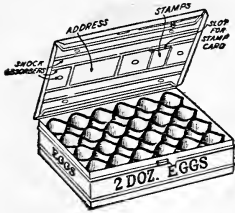
The small feeder holds 50 pounds mash, 15 pounds shells, 15 pounds grit, 9 pounds scraps and 5 pounds charcoal. For 75 to 100 birds. The large size, 100 pounds mash and the same amount of the other feeds. For 150 to 200 birds.

Easy to fill, easy to clean.

Prices—3 feet, \$11.80; 5 feet, \$17.45.

## Sell Eggs By Mail

TO YOUR CITY FRIENDS SHIPPED IN ALUMINIZED METAL EGG CRATES



Metal-Edge Filler

Made for interchangeable shipments. Indestructible — will last for years. Pays for itself in a few shipments. Buy yours now and realize more money on your eggs. Your friends want them.

**THE METAL-EDGE FILLER** is a wonder. A new invention and cannot be beaten for service and safe carrying of eggs. Light in weight and very strong. Thousands of these economy crates in daily use.

Sizes	Weights	POSTAGE		Price
		Empty	Filled	
1½ doz.	3 lbs.	9c.	12c.	\$1.25
2 doz.	3 lbs.	9c.	12c.	1.50
3 doz.	4 lbs.	10c.	14c.	1.75
4 doz.	5 lbs.	11c.	17c.	2.00
6 doz.	6 lbs.	12c.	21c.	2.50
9 doz.	8 lbs.	14c.	27c.	3.25
12 doz.	10 lbs.	16c.	32c.	4.00

Add postage to destination. Rates above apply within 150 miles.

Write us about crate to ship butter and eggs.

## Egg-O-Hatch

FOR BETTERING THE INCUBATOR HATCH

Strengthens the Chick and Weakens the Shell

The most serious problem confronting the poultryman is the percentage of strong, livable chicks that he will receive at hatching time and the percentage that will appear as "dead in the shell." Incubator hatching is different from hen hatching, with eggs of various age and hardness of shell, less frequent shifting or turning and excessive feeding of meat, grain, etc., to breeding stock. Poor hatches are not so often the fault of the incubator as of the eggs. A weak chick in a hard, tough shell has little chance to emerge from the shell, but if you have, at hatching time, strong chicks and weak, porous shells, they will not only hatch better but will grow and thrive better after hatching. To save the shell-bound chicks, use "Egg-O-Hatch."

Price, 50 cents; by mail, 57 cents



## Waterproof Sheeting

This is a waterproof cloth prepared especially for hen houses, and is highly recommended for this purpose. 36 inches wide.

Price, 30 cents yard; by mail, 35 cents yard

## Water Glass

Saves Money and Helps Keep Down the High Cost of Living

Put your eggs down in the spring, when they are cheap, and keep them fresh for winter use. One gallon makes sufficient solution for fifty dozen. Do not trust eggs to water glass of inferior strength.

### PRICE

- 1 pt., 15 cts.; by mail, 23 cts.
- 1 qt., 25 cts.; by mail, 36 cts.
- 1 gal., 75 cts.; by mail, \$1.00.



Buy Eggs When Cheap. Store Them with

## Egg-Ash

and leave them to use when

## Eggs Are High

This is a powder, conforming to pure food requirements, and is very convenient to use. One package is sufficient for 25 dozen eggs.

Price, 35 cents; by mail, 40 cents

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

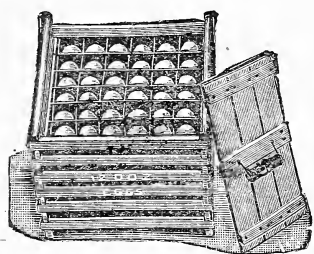
## "K. & W." Egg Cases

The Most Popular Egg Case in the Market and Used Largely by Shippers of Eggs

These cases in the fifteen dozen and thirty dozen sizes are made deeper than the standard cases, so as to permit the use of the extra deep fillers with which they are fitted and the Mapes' safety cushion flats. Four extra flats are included, which take the place of the excelsior cushions which are usually used.

### PRICES COMPLETE

8 dozen .....	\$1.10; by mail, \$1.25
15 " .....	1.85; " " 2.05
30 " .....	2.35; " " 2.61
49 " (too large to mail)....	2.85



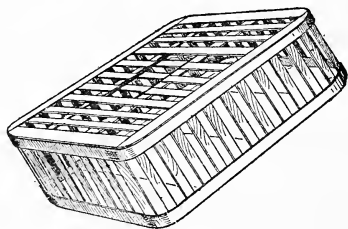
## Humpty Dumpty Egg Crate

A light, strong and inexpensive crate for carrying eggs to market or shipping by express. These crates are fitted with the Mapes' safety cushion flats, which almost eliminate breakage. We carry these in three sizes.

### PRICES

3 dozen,	40c.	6 dozen,	50c.	12 dozen,	60c.
By mail,	50c.	By mail,	61c.	By mail,	85c.

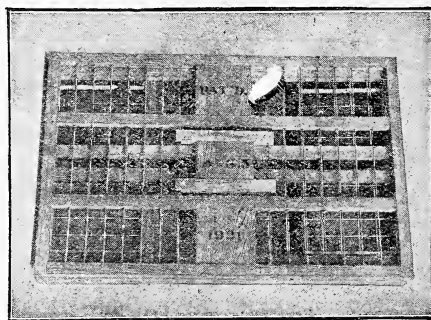
## Newfield Poultry Shipping Crate



Made of green elm, then thoroughly dried. Its round corners prevent injury and loss by crowding, so frequent in square cornered crates.

Price, \$2.75

## Folding Crate



Strongest crate made. Saves space; saves freight.

Price, \$2.75

## Egg Case Cushions

These cushions are made of excelsior, eleven inches square and about one-half inch thick, for use in either fifteen or thirty dozen egg cases, to prevent the eggs from being broken in shipment.

Price, \$1.70 per hundred; by mail, \$2.03.

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Apex Roofing

Medium weight 45 pounds.

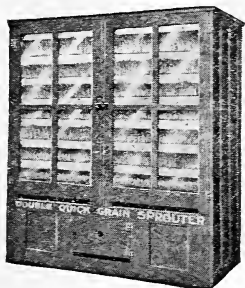
Heavy weight 55 pounds.

### Red Mineral Surfaced Roofing

One weight only. Average weight 85 pounds. Each roll will cover 100 sq. ft. of roof surface.

Write for quotations.

## Double Quick Grain Sprouter



Outside cypress case insulated to retain heat. Inside galvanized steel grain chamber. Lamp heat passes up between the walls. Utilizes all the heat and saves in oil. May be used in zero temperatures. The water pan above the lamp creates the vapor that bathes the grain in warm moisture, thus producing the highly edible vapor-bath sprouts. Fitted with drain tube for overflow, well ventilated, has glass doors to "green" the sprouts, removable top, etc. Grain trays made of one-piece galvanized sheet steel without rivets or solder.

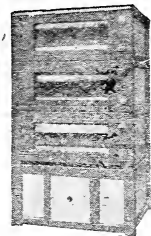
#### PRICES

No. 24,	$\frac{3}{4}$ bu.,	75 to	100 hens.....	\$18.00
No. 40,	$1\frac{1}{4}$ bu.,	125 to	175 hens.....	24.00
No. 80,	$2\frac{1}{2}$ bu.,	250 to	325 hens.....	36.00
No. 160,	5 bu.,	500 to	600 hens.....	49.00
No. 256,	8 bu.,	800 to	1000 hens.....	72.00

Furnished with Lamp, Thermometer, Directions.

## Premium Metal Sectional Sprouter

Constructed of galvanized sheet steel reinforced by an outside cypress framework. The Premium incorporates all the essentials of a vapor-bath sprouter, such as heater, vapor pan, glass doors, etc. The Premium is designed to be used where temperature does not run much below freezing. It is built on the sectional plan; add sections as it is desired to increase the capacity. Small base holds  $\frac{1}{2}$  bushel and each small section  $\frac{1}{2}$  bushel. Large base holds  $1\frac{1}{2}$  bushels and each large section 1 bushel.



#### Prices

Small Base, $\frac{1}{2}$ bu., 50 hens.....	\$10.00	Large Base, $1\frac{1}{2}$ bu., 150 hens.....	\$18.00
Each Small Section, $\frac{1}{2}$ bu. ....	5.00	Each Large Section, 1 bu. ....	7.00

Furnished with Lamp, Thermometer, Directions.  
Shipments made direct from factory by freight prepaid.

## The Collins Sprouter

Why It Will Earn You Money

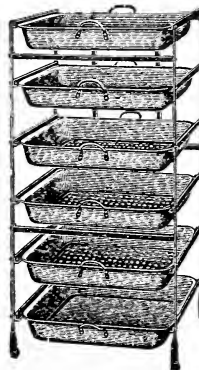


It will make hens lay when eggs bring high prices. And to get eggs at that time you must make conditions like those of springtime, when the hens lay naturally. In the spring there is always plenty of fresh green grass, but you can furnish winter green feed at small cost, which is quite as palatable and even more nourishing. Sprouted oats will "make the hens sing." It will give you better hatches, is invaluable in the breeding pen. It furnishes much needed green feed for baby chicks. 8 pans, 11x15 in., weight 14 lbs.

Price, \$4.00

## No. 110 Oats Sprouter

The Natural Process for Sprouting



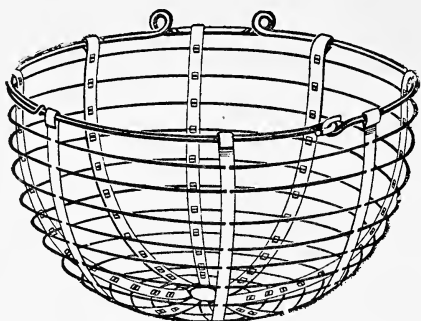
Contains five sprouting pans and one drip pan 16x17 inches. Iron rack is 35 inches high.

By feeding sprouted oats through the winter, egg production can be kept up to a much larger degree than otherwise.

Price, \$6.25



## Wire Hen's Nest



Strongly made of heavy wire, and very durable. Fastens to the wall with two heavy screws. Easily kept clean. No harbor for vermin.

Price, 25c.; \$2.50 per doz.

## Philadelphia Poultry Marker



punching web between the toes. Made in two sizes.  
Price, 25c.; by mail, 27c.

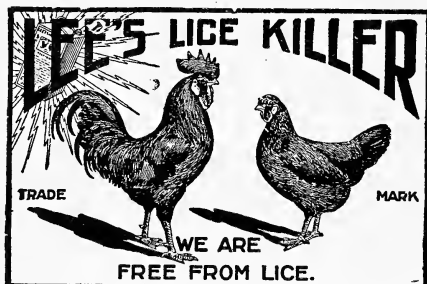
Do you keep a record of chickens? - There is no better or quicker way than by marking, as many different marks can be made by

## Perfect Chicken Punch



Chicks may be marked as soon as hatched without injury.

Price, 25c.; by mail, 27c.



## Lee's Lice Killer

A liquid preparation having all the killing properties of any powder or dip; besides, the vapor that it gives off is destructive to insect life, though harmless to fowl. It permeates every crack and crevice of the poultry house and all the hiding places of vermin and destroys them.

### PRICE

1 qt., 60c.; ½ gal., 90c.; 1 gal., \$1.60

## Lambert's Death to Lice Powder

For Fowls, Chickens and Animals

### DIRECTIONS

Work the powder well down to the skin, especially under the wings and around the neck. Dust setting hens thoroughly. Scatter about a teaspoonful of the powder in the nest material.

**For Lice on Young Chicks**—Rub small quantities of the powder into the down on the head, neck and back, then brush the powder out.

Price: 15 oz. pkg., 25c.; 3 lb. pkg., 50c.; 6¼ lb. pkg., \$1.00.

## Sulphur Fumigating Candle

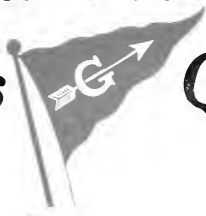
The candle is made from pure, high grade sulphur, and has a circular wick, which, when once lighted, stays lighted. Is especially useful to poultrymen in ridding poultry houses of insect pests, as the vapor from it penetrates crevices not reached by other means.

In circular tin box, price, 15 cents.



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# ***"Practical Tests Prove Grandin's Quality"***



## **The Proof of the Pudding is in the Eating**

That "The Proof of the Pudding is in the Eating," is a fact so universally and unanimously admitted that it permits no dispute; and it applies to poultry feeding as much as to anything else.



**GRANDIN'S LAYING MASH with DRIED BUTTERMILK PRODUCES RESULTS.** The hen cannot change the composition of the egg to suit the kind of feed with which she is supplied; she will not lay to the limit of her capacity unless she has the right materials for making a perfect product.

When you insist on GRANDIN'S LAYING MASH with DRIED BUTTERMILK you are playing safe as only the very best of ingredients are used. DON'T say to your grain dealer that you want a bag of Dry Mash, but that you want GRANDIN'S LAYING MASH. By doing this he will understand that you want the very best and that any mash will not do.

## **Grandin's Screened Scratch Feed**

Exercise is of vital importance to the health of the fowl and to proper assimilation of food. Breeding, laying or growing stock must have plenty of exercise to do well and to assist them in using their food to the best of advantage through proper channels. Without exercise, food, which under normal conditions should be burned as fuel, used in the repair of tissues or making eggs, will be diverted into forming additional flesh or fat. Keep the birds busy by giving them a good clean, well-balanced scratch feed in a good deep litter.

If you want the highest grade scratch feed that can possibly be produced at a moderate cost, there is no scratch feed manufactured that is superior to GRANDIN'S SCREENED SCRATCH FEED. It is clean, sweet and wholesome, made of the highest quality grains—mixed in the right proportions to produce the best results.



**Ask for — GRANDIN'S POULTRY and DAIRY BOOK — its Free**



## Grandin's Growing Feed with Dried Buttermilk

**MAKES THEM GROW HEALTHY and VIGOROUS.** For the reason, that everything a chick needs for quick growth is in this feed—correctly proportioned with the cleanest and sweetest ingredients obtainable and is therefore very appetizing. It is a properly balanced ration that stimulates growth and increases your profit. Keeps chicks strong and healthy—helps them to resist disease. You'll see the difference as soon as you begin feeding it. The results will justify its continuation, for it will prove its **REAL VALUE.**

## Grandin's Intermediate Chick Feed

Is in a class by itself, containing no Buckwheat and the oats are hulled, and no off grade grain is used in this or any of the **GRANDIN'S FEEDS.**

Right feeding starts and constantly develops the chick along lines of vigor, health, sturdiness and vitality. Nothing is more important, nothing counts for as much in the results you get later.

A trial will convince you of the real value of **GRANDIN'S INTERMEDIATE CHICK FEED.**



## Grandin's Baby Chick Starter with Dried Buttermilk



**HELPS THE BABY CHICK TO LIVE AND GROW** by supplying the chick with a **Real Baby Food.** The first three weeks of a chick's life is the most particular and the most important period of its existence. If he weakens here, he is weakened for life. If he can go thru the first three or four weeks in fine form, good digestion and tough and hard muscles, the remainder of the job will be comparatively easy.

**GRANDIN'S BABY CHICK STARTER** is a wonderful feed. You will be pleased to see how well the chicks like this feed and you will be surprised to see how fast their little feathers will begin to grow.

## Grandin's Baby Chick Feed

Is always very clean and free from fine material and dust. Therefore you get full weight of good, sound grains. We want to call your attention to the fact that everything used in the manufacture of **GRANDIN'S BABY CHICK FEED** is cracked and that it does not contain cracked green peas, white corn and highly colored seeds to catch the eye of the buyer. These have very little food value for the growing chick and they are much better off without them.



**"PRACTICAL TESTS PROVE GRANDIN'S QUALITY"**

## Pratt's Poultry Worm Powder

Kills all kinds of worms and is easy to use. Just mix it with any mash you are using, then go ahead and feed as usual. Treatment costs less than one cent per bird.

Price, 50 cents per package.

More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits that come from using

## Pratt's Animal Regulator

This is the original and pioneer stock regulator of America. Tested thoroughly for nearly half a century, its worth is known and recognized by stock owners the world over. Always sold on a guarantee that it will satisfy you or your money back.

25c., 50c. and \$1.00. 12 lb. pails, \$2.15; 25 lb. pails, \$3.40.



## International Stock Food Tonic

Three Feeds for One Cent



FOR COWS

FOR HORSES

FOR HOGS

In packages, 25c., 50c. and \$1.00; in pails, \$4.00.

BIGGER LIVE

STOCK PROFITS

can be made from every animal on your farm. You can rapidly increase the weight of your hogs, beef cattle and sheep—you can greatly increase the milk flow of your cows—you can get more work from your horses—through the use of this food tonic.

## Graylawn Farm

Louse-Chase

**NO MORE LICE.** Absolutely kills the lice on your cattle, swine, poultry, horses and sheep. Satisfaction guaranteed or money back. Used and recommended by state colleges and thousands of breeders. Safe, easy and economical to use.

Price, \$1.00 per large package; 50c. per small package.

Scab-Chase

**MANGE, ITCH—**Scabies and other parasite skin diseases of all farm animals, poultry, dogs and cats can be quickly and positively cured with Graylawn Farm Scab-Chase, or it does not cost you a cent. Safe, easy and economical to use.

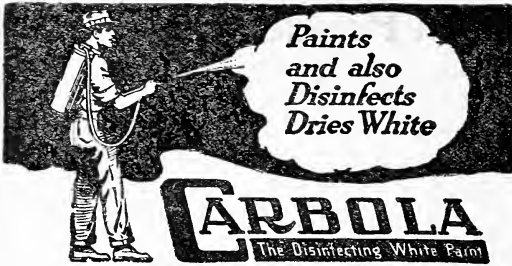
Price, 75c and \$1.50 per package.

## The Townsend Wire Stretcher

The Townsend Wire Stretcher is made with a wooden lever or handle three feet in length, to which is attached malleable iron pinchers, into which are riveted corrugated steel grips. Warranted not to slip. It is a substantial and very durable implement.

Price, \$2.00

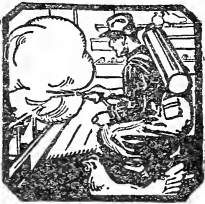




## THE POWDER OF MANY USES

**C**ARBOLA is a white paint and powerful disinfectant combined in powder form. It is ready to use as soon as it is mixed with water. It can be easily and quickly applied to building interiors with brush or spray pump. Disinfects and dries pure white. Does not flake or peel off. *One pound covers 100 sq. ft.*

CARBOLA makes buildings light, clean, sweet-smelling and sanitary. Helps to prevent contagious diseases among live stock and to keep poultry, cattle, horses, etc., free from lice, mites and other parasites. Recommended by leading agricultural colleges, experiment stations and health authorities for use in poultry houses, stables, dairies, hog pens, cellars, garages, dog kennels, rabbit hutches, factories, warehouses, out-buildings, on trees and tree trunks, and in the garden.



### IN THE CHICKEN HOUSE

To paint and disinfect side walls, ceilings, roosts and brooders. Helps keep the birds free from lice and mites and the buildings clean, light and sanitary. Sprinkle it in the nests and rub it into the birds. The dry powder is an excellent louse powder.

### IN THE BARN

To paint and disinfect side walls, ceilings, stalls, etc., as an aid to cleanliness and prevention of tuberculosis, foot and mouth disease, and other contagious diseases. Spread the dry powder on floor where the cow stands. Use it as a louse powder. Wash hands with powder before milking.



### IN THE HOUSE

Carbola applied to walls and ceilings of cellars will kill bad odors, mustiness, prevent cobwebs, disease germs, drive out spiders, ants and other insects. Use the dry powder as cleanser for pots, pans, cutlery and for removing stains from woodwork. Especially recommended in bathroom for cleaning bathtubs, wash basins, tile and for disinfecting the bowl.



Dust Carbola on rose bushes, peas, cabbage, tomato plants, etc., to help get rid of insects and worms. Spray it on trees and tree trunks.

It increases light, sanitation and general appearance in factory buildings. It makes cleaner warehouses. An excellent and economical interior finish for garages.

### PRICES

Trial package, 30 cents	
5 pounds ( 5 gallons) .....	\$ .75
10 pounds (10 gallons) .....	1.25
50 pounds (50 gallons) .....	5.00
200-pound bags, \$18.00	

## Shipping Boxes

### FOR DAY OLD CHICKS

These chick boxes are made of a staunch grade of corrugated fibre board and when assembled will support heavy pressure without collapse. These boxes conform to International Baby Chick Association specifications in size, shape and interior arrangement. Each compartment carries twenty-five chicks without crowding. The 100 chick size has but four separate pieces—the box, the cover and two crossed partitions; the 50 chick size has a single partition, and the 25 chick size consists of box and cover only. The boxes are always shipped knocked down flat. The separate parts are accurately cut and scored for quick set-up.

25 chick, 20c.; 50 chick, 30c.; 100 chick, 35c.

## Day Old Chicks

Rhode Island Reds, Barred Plymouth Rocks, White Leghorns, White Wyandottes.

## Pure Dried Buttermilk

### FOR PROFITABLE POULTRY RAISING

Guaranteed analysis: Protein, 30%; fat, 5.5%; fibre, none.

This is a highly concentrated feed, and contains no fibre. In addition to its feed value, it has marked medicinal and tonic properties, which put it in a class by itself as a supplement to the grain ration for hogs and poultry. Buttermilk contains vitamins, essential to economical growth, in a concentrated, easily obtainable form. Its lactic acid content of 6 to 8% acts as a laxative, and digestive stimulant and a preventative of intestinal diseases. What other feed combines these valuable properties?

Compared with other forms of buttermilk:

100 pounds of Pure Dried Buttermilk equals  
308 pounds of condensed Buttermilk or  
1,230 pounds (150 gallons) Liquid Buttermilk.

Write for prices

## Cel-O-Glass

(Patent Applied For)

### THE REAL GLASS SUBSTITUTE

Cel-O-Glass is a high grade, low priced substitute for glass. It is unaffected by rain, hail, snow, sun or wind. It can be cut or bent to any desired shape, and is practically indestructible.

By using Cel-O-Glass in place of ordinary glass for your poultry houses and scratch pens, your chickens will lay better and grow faster, due to the invigorating effects of the ultra violet ray.

### EASY TO PUT UP

Simply cut Cel-O-Glass to size with an ordinary pair of shears and fasten it with a few tacks.

Ideal for cold frames or hotbed sash, for windows in barns, garages and outbuildings.

Cel-O-Glass is made in rolls 3 feet wide and 100 feet in length. It weighs only 1-7 pound per square foot.

### PRICES

Full rolls, 15c. per sq. ft.; cut lengths, 17c. per sq. ft.

## Blatchford's Calf Meal



"Good to the last drop"

### The Complete Milk-Equal

Just the thing to raise your calves right from birth.

Then sell your milk and get the benefit of the high creamery prices.

**No more scouring calves.**

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion. Will push calves forward better and quicker than any other food.

Sold in 100, 50 and 25 pound bags.

100 POUNDS MAKES 100 GALLONS OF COMPLETE MILK-SUBSTITUTE

## From Sow to Pasture

Wean your little pigs easily, safely and cheaply on

### BLATCHFORD'S PIG MEAL

From Pig-hood to Pork-age it gives big bone and solid flesh. Prevents loss of growth and vitality during the critical weaning period and always makes the runts catch up.

Sold in 100, 50 and 25 pound bags.

## Poultry Feeds of Many Kinds

Buttermilk Baby Chick Food

Dried Skim Milk

Chick Scratch Food

Intermediate Scratch Food

Large Scratch Food

Growing Mash

Laying Mash

Alfalfa

Dried Buttermilk

Meat Scraps

Fish Meal

Bone Meal

Poultry Bone

Oyster Shells

Grit (fine, medium, coarse)

Charcoal (fine, medium, coarse)

Cod Liver Oil

Gold Leaf Tobacco Powder

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## Roup      White Diarrhoea      Canker

B-K Fed in Drinking Water Kills the Germs

No Poison—Clean

The new and better way to prevent poultry diseases. Based on sound principles of disease prevention of birds, animals and people. This was proved by war experience. Leading poultrymen and authorities recommend it.

Ask for Bulletin 213

1 quart, - - - - -	\$ 1.25
1 gallon jugs, - - - - -	3.00
5 gallon jugs, - - - - -	12.50



SUCCESSFUL FOR NEARLY FIFTEEN YEARS

Manufactured only by

GENERAL LABORATORIES

Madison, Wis.

## Mann's Bone Cutters

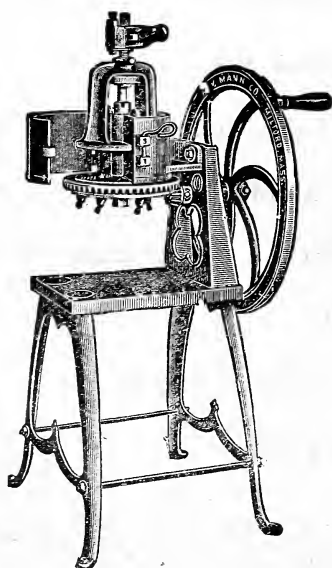
### The Standard of Excellence

A standard which has only been obtained by years of experience

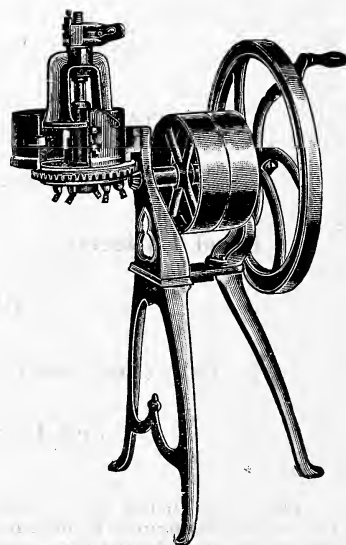
### Price List

No discount from these prices.

No. 5C (with crank handle),	\$12.00
No. 5B (with balance wheel),	15.00
No. 5BM (with bal. wheel and iron stand),	18.00
No. 7 (with balance wheel),	19.75
No. 7½ (semi-power machine),	28.00
No. 9 (Stand. Bone Cutter),	30.00
No. 11 (Comb'n Power Cutter)	45.00
No. 12 (Small Power Cutter),	65.00
No. 15 (Large Power Cutter),	125.00
No. 18 (Large Power Cutter),	175.00



No. 9



No. 7½

Send for Illustrated Catalog

## Ice Tools

Everything in ice harvesting tools and supplies for ice men, dairymen and farmers. Complete illustrated catalog sent upon request. Write us for pamphlet, "How to Harvest Ice."



BAR CHISEL

BREAKING BAR



SPLITTING FORK

ICE SHAVER



SPLITTING CHISEL

ICE SAW



ICE HOOK

LINE MARKER

RING HANDLE  
SPLITTING CHISEL

TONGS

## Pray's Patent Ice Plow

This plow is especially designed to meet the demand for a cheap and efficient ice cutter for farmers and dairymen. It will cut from 20 to 40 tons an hour, cutting the ice blocks of uniform size, which saves much labor when packing.

The extra weight of the rider holds the plow to its work and allows the horse to be hitched much closer to the plow—an advantage where the pond is small and all the ice needed from the edge of the pond.

It is the only plow that can be successfully used by one person. The draft back of runners omits the necessity of leader or rider.

It is the only plow that has an adjustable tooth. .

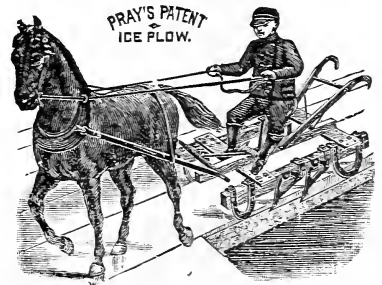
It is the only plow that works with runners.

It turns easier at the end of the row than any other plow.

It cuts ice with more economy on a small pond than any other plow.

A horse and one man can cut as much ice as ten men with saws.

Upon a shallow pond where a saw cannot be used this plow is indispensable.



WARRANTED TO WORK AS REPRESENTED

Price, Four-Tooth Plow, \$20.00; Six-Tooth Plow, \$25.50; Eight-Tooth Plow, \$30.50.

# Massey-Harris No. 6 Cream Separator

## An Aid to Profitable Dairying

BUILT IN SEVERAL SIZES

Even the smallest globules of butter fat are saved when separating with this machine. It has an improved bowl which gives practically perfect separation regardless of the temperature of the milk or of the density of the cream that is being run. Indeed, so closely does it skim, it is not at all unusual to find less than one hundredth of one per cent. of butter fat in the skim milk and oftentimes it is difficult to detect even a trace.

The gears are held in positive alignment by a one-piece frame and have diagonal teeth cut from the solid by special automatic machines which make them absolutely correct as to pitch and mesh. For the worm wheel, phosphor-bronze, a metal which develops very little friction when running in contact with steel, is used. An efficient splash system of oiling keeps the gears well lubricated.

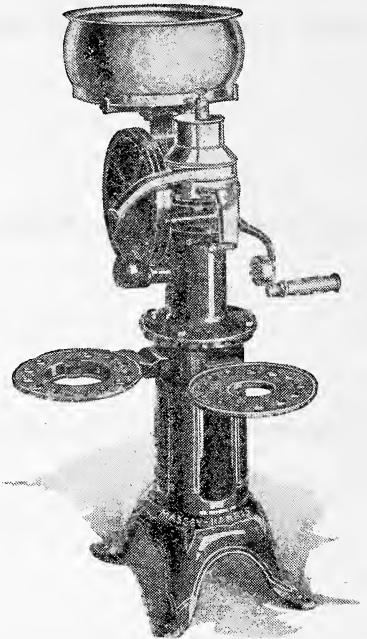
Both the spindle and the bowl are made as separate pieces and are so designed that the latter can be removed without disturbing the former. This construction facilitates the washing of the bowl in that you do not have to handle the spindle with it, and besides, when returning it there is no chance of springing the spindle and getting the bowl out of balance or of damaging the worm or worm gear.

All of the weight of the spindle, the bowl and the milk being separated is carried on a steel ball on which the spindle stands and which is mounted in a phosphor-bronze bearing. A simple adjustment is provided in the bearing for regulating the height of the bowl, and a removable, hardened steel toe, which can easily be replaced if it should ever become worn, is fitted into the lower end of the spindle. As the steel ball revolves when the spindle turns, friction and wear are minimized. A bell indicator enables the operator to know whether or not he is turning the machine at the correct number of revolutions per minute.

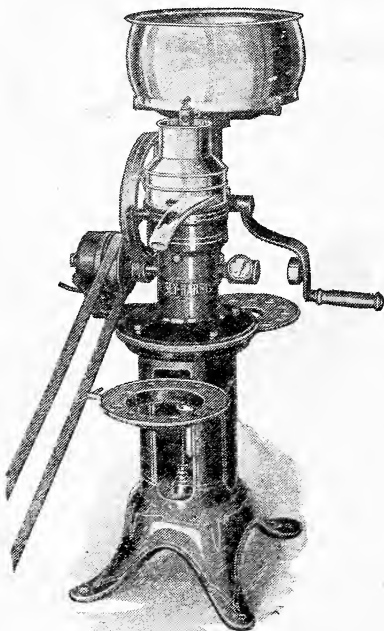
The smooth running of the bowl is always assured, as no

matter whether you are just starting the machine or are letting it slow down, the swaying motion incident to the slower speeds is absorbed by a spring cushion bearing, which keeps the spindle from getting out of line. Consequently, the milk is always distributed over the surfaces of the discs so evenly, the flow of the cream is never retarded by skim-milk flooding its course and the effectiveness of the separation is preserved.

In the main, the bowl consists of a steel case containing a specially designed split wing having six V-shaped openings and a series of skimming discs. The whole milk enters at the top and passes into the split wing through which it is distributed over the discs so uniformly that their entire surface is utilized.



Equipped as a Straight Hand Machine



Equipped with the Governor Pulley for Power Use

## New Governor Pulley for Massey-Harris No. 6 Cream Separator

This new governor pulley has been developed to provide a reliable means of driving the Massey-Harris Cream Separator by power and is exclusively a Massey-Harris feature. It absolutely governs and controls the speed at which the separator turns irrespective of the rate at which the pulley on the engine revolves. Indeed, it will instantly take care of any variation in speed on the part of the engine or motor within a range of 800 to 1400 revolutions per minute and keep the speed of the separator uniform and at the correct rate for the best results.

The principle is that of the automobile planetary transmission disc clutch, the governing being done by a regulator working in connection with a series of multiple fibre discs, and so positive is the action, once the pulley is set, it will hold an unvarying speed almost indefinitely. When the engine stops the pulley will let the separator run down and it need not be removed to turn the machine by hand. A sensitive and reliable speed indicator is a part of each outfit.

Price on application

## De Laval Cream Separator

**Skims Cleanest, Has Largest Capacity, Turns Easiest, Most Convenient to Wash and Lasts the Longest**

No other machine or implement used on the farm receives anywhere near such constant use as a cream separator, nor is there any other farm machine or equipment with which quality of work means so much and first cost so little.

Twice a day—730 times a year—your separator either saves cream or wastes it. A separator that runs hard, gets out of order, or is not easy to wash is a constant bother, and it takes only a little loss of cream at each separation to amount to more in the course of the year than you originally paid for the machine.

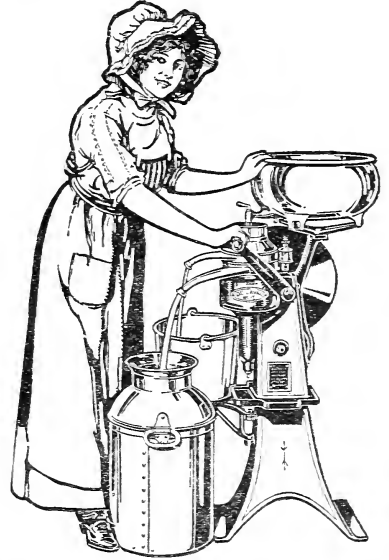
### THE MOST PROFITABLE MACHINE ON THE FARM

It pays to buy a reliable separator. That is why practically all of the cream separators used in creameries and milk plants the world over are De Laval's. Many of the biggest and most successful dairymen are De Laval users. Experience has taught them that the De Laval is one of the best and most economical separators.

If you have two or more cows you need a separator, and you cannot do better than to select the separator that unprejudiced judges all over the world have chosen as the best.

We will be glad to mail you a catalog and quote prices.

All sizes constantly in stock.

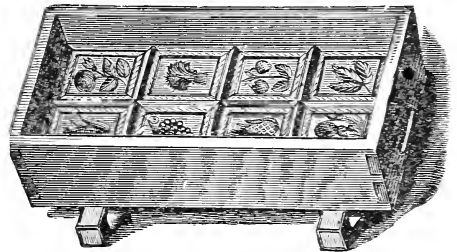


## Combination Butter Mould

These moulds are expressly designed to meet the demand for strictly first-class, hand-carved designs.

The cut here shown represents No. 6, which holds two pounds, and is divided into eight  $\frac{1}{4}$ -pound cakes.

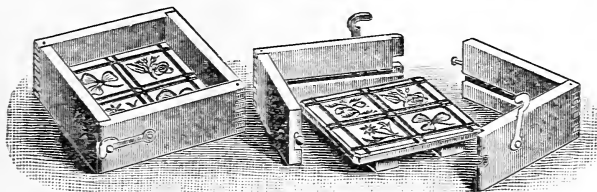
Prints engraved to order, with ordinary designs, initials or monogram, without extra charge, excepting that, should more than six letters be wanted on each cake, a charge of five cents per letter will be made for each letter in excess. Prices quoted on application for special or complicated designs or lettering.



No. of Prints	No. of Cakes	Capacity in Pounds	Capacity of Each Cake in Ounces	Dimensions of Moulds in Inches	Dimensions of Each Cake	Price
2	4	2	8	11 x 3 $\frac{3}{4}$	3 $\frac{3}{4}$ x 2 $\frac{3}{4}$	\$ 8.50
3	4	2	8	12 x 3	3 x 3	8.50
4	4	1	4	4 $\frac{1}{2}$ x 5	2 $\frac{1}{4}$ x 2 $\frac{1}{2}$	7.75
5	4	1	4	10 x 2 $\frac{1}{2}$	2 $\frac{1}{2}$ x 2 $\frac{1}{2}$	8.50
6	8	2	4	10 x 4 $\frac{1}{2}$	2 $\frac{1}{4}$ x 2 $\frac{1}{2}$	9.75
10	24	1 $\frac{1}{2}$	1	10 x 4	1 $\frac{1}{4}$ x 1-3	12.00
20A	4	2	8	10 x 3 $\frac{1}{2}$	3 $\frac{1}{2}$ x 2 $\frac{1}{2}$	8.50

By mail add 10c.

## Blanchard Butter Mould



$\frac{1}{2}$  lb., two  $\frac{1}{4}$  lb. prints, 75c.; by mail, 82c.; 1 lb. four  $\frac{1}{4}$  lb. prints, 85c.; by mail, 92c.; 2 lbs., eight  $\frac{1}{4}$  lb. prints, \$1.35; by mail, \$1.42.

If engraved with initials, or any hand carving, add to the REGULAR PRICE 25 cents for each cake so engraved.

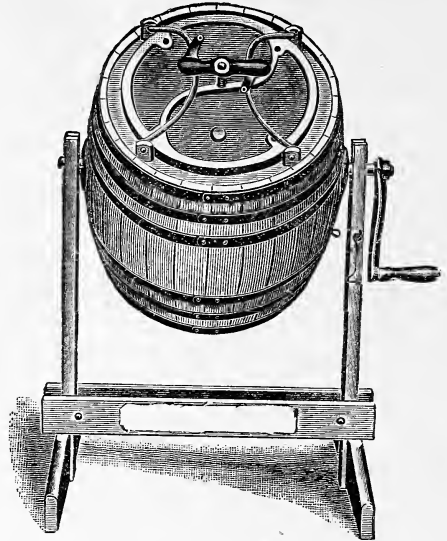
## The Belle Churn

### One of the Best Barrel Churns Made

This churn is made in the most thorough manner and of kiln-dried white oak. It will last for years. The principle is concussion and not friction—has no floats or paddles inside. It is easily operated and easily cleaned. Perfect in construction, and having no parts liable to break or get out of order, it fully meets the requirements of large or small dairies. Be sure and get a churn large enough so that it will not be necessary to fill over half full, less is better, if you wish good work.

Single and double pulleys and pulley shafts can be furnished if desired to run by power.

						Price
No. 0, 6 gal.,	churns from 1 to 3 gals. cream.....					\$ 7.00
No. 1, 10 "	" " 1 " 5 "	"	"	"	.....	7.75
No. 2, 15 "	" " 1 " 7 "	"	"	"	.....	8.75
No. 3, 20 "	" " 2 " 9 "	"	"	"	.....	9.75
No. 4, 25 "	" " 2 " 12 "	"	"	"	.....	12.25
No. 5, 35 "	" " 3 " 16 "	"	"	"	.....	14.00
No. 6, 60 "	" " 6 " 22 "	"	"	"	with frame	24.25
No. 6, 60 "	" " 6 " 22 "	"	"	"	no frame	19.25

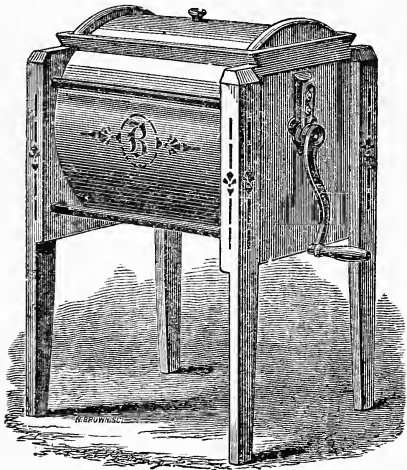


## The Blanchard Churn

The following are the leading merits of the **Blanchard Churn**:

Perfect quality of all materials used. Excellency of manufacture. Simplicity of construction, having no cog wheels or gearing. Durability. Ease of operation. The action of the dasher is such as to cause agitation of the cream by creating currents, and not by beating or by friction of the cream, which may injure the grain of the butter. Facility in removing the dasher and getting at the butter. Ease of cleaning, the form of construction making the inside without any inaccessible or invisible angles or corners.

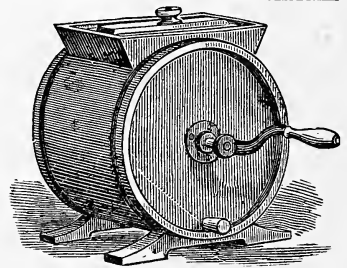
						Price
No. 3, for up to about 2 gallons of cream.....						\$10.00
No. 4, " " 4 " "					.....	11.75
No. 5, " " 6 " "					.....	13.50
No. 6, " " 12 " "					.....	16.75
No. 7, " " 16 " "					.....	20.00



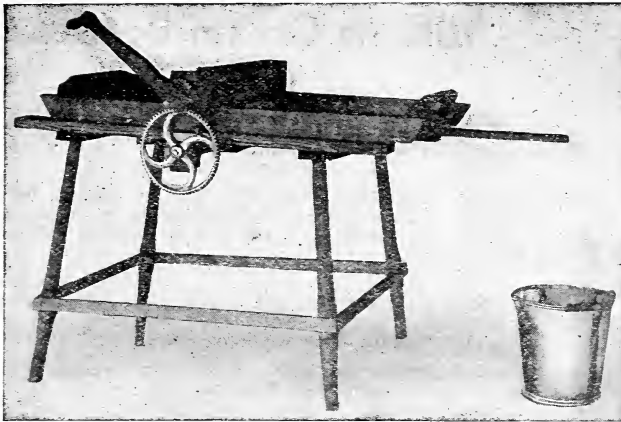
## Cylinder Churn

A favorite style of churn which has been in use for many years.

						Price
No. 1, capacity 2¼ gallons.....						\$4.25
No. 2, " 4 "					.....	5.25
No. 3, " 7 "					.....	6.00
No. 4, " 10½ "					.....	6.75



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



## The Waters Butter Worker

Practical, efficient, durable. It combines more advantages than any other. The tray is removable and thus takes the place of the butter bowl.

Will work butter in any condition satisfactorily. Made in sizes to suit any dairy or factory.

Size No.	Length of Tray	Width of Tray	Capacity	Price	Size No.	Length of Tray	Width of Tray	Capacity	Price
0.	27 in.	14 in.	1 to 15 lbs.	\$25.00	3.	39 in.	20 in.	5 to 50 lbs.	\$31.00
1.	36 in.	15 in.	5 to 30 lbs.	26.00	4.	48 in.	22 in.	10 to 75 lbs.	34.50
2.	36 in.	18 in.	5 to 40 lbs.	27.50					

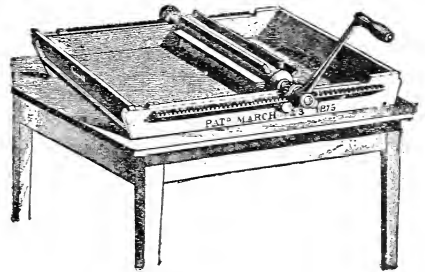
## Reid's Patent Butter Worker

These machines are all built of the best material.

The iron part is galvanized, preventing rust.

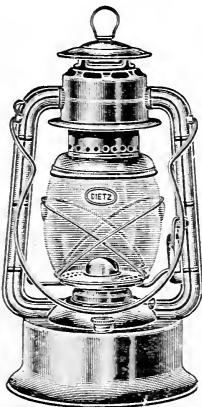
No.	Size	Depth Inside	Capacity	Price
1.	23 x 36 in.	2½ in.	50 lbs.	\$23.75
2.	20 x 36 in.	2½ in.	30 lbs.	20.50
3.	17 x 27 in.	2½ in.	20 lbs.	17.50
4.	14 x 23 in.	2½ in.	10 lbs.	15.00

Three pounds can be worked in any of the above machines, as well as a larger quantity. In buying a worker you should choose a size that will work the largest quantity that you will be likely to want to work at a time



## Dietz Lanterns and Driving Lamps

Neater, Trimmer, Better.  
More Convenient than any Tubular Lantern on the Market.

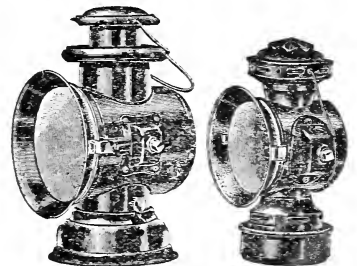


"Wizard" Lantern

Can't Spill Oil, Can't Blow Out.

Since Dietz introduced the original tubular lantern, nearly a half century ago, notwithstanding the fact that many inferior imitations have appeared, these manufacturers still enjoy the reputation of having the largest output of lanterns of any concern in the world, the goods holding their place by reason of their absolute merit, for they fill to perfection every requirement for which a lantern or lamp may be intended.

That it may not be forgotten that "Dietz" lanterns are "different" from a host of others, each lantern of the Dietz standard pattern will be tagged with a yellow quality tag bearing the Dietz trademark.



Driving Lamps

We have in stock a full line of all the leading patterns. Prices furnished on application.





## Milk or Cream Bottles

Refuse to receive milk in any other than glass bottles, as it is the only way by which you can get milk that is sweet and pure and that has not come in contact with the numberless street odors, flies, and many other undesirable influences.

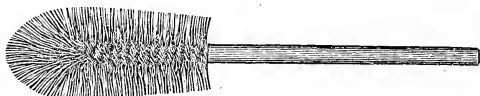
The "COMMON SENSE" Bottle, capped by a strong, clean paper cap, is the BEST, as it can be washed absolutely CLEAN, and no taint is possible in milk put up in these bottles.

	Per Doz.
½ pint, Common Sense.....	\$ .65
1 pint, Common Sense.....	.80
1 quart, Common Sense.....	1.00

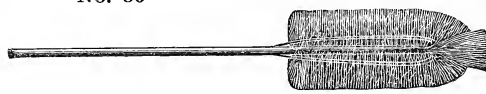
Made in two sizes—No. 1 taking a cap 1 7/8 inches in diameter, and No. 2 a cap 1 5/8 inches in diameter.

Special prices on five or ten gross lots.

## Brushes



No. 86



No. 61



Cover Sprout Brush

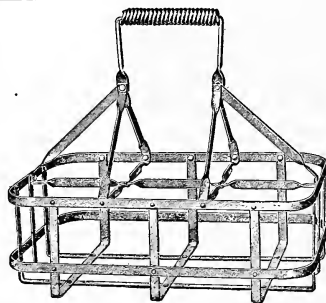
We are in a position to furnish the best kind of brushes for dairy use, and recommend especially our line of can, separator and bottle brushes.

Separator Bowl .....	50c.; by mail, 57c.	Bottle Brushes, No. 61.....	45c.; by mail, 50c.
Separator Tube .....	20c.; " " 23c	" " No. 86.....	70c.; " " 75c.
Separator Cover Spouts.....	20c.; " " 23c	Test Bottle .....	10c.; " " 13c.
		Milk Can .....	\$1.00; " " \$1.08

Special Prices for Large Quantities

## Milk Bottle Carriers

4 quarts, round wire .....	\$1.35; by mail, \$1.43
6 quarts, round wire .....	1.35; " " 1.45
8 quarts, round wire .....	1.65; " " 1.75
6 quarts, flat wire .....	1.65; " " 1.75
8 quarts, flat wire .....	2.15; " " 2.25



## Bottle Boxes

For carrying bottles on the delivery trucks. Made of hard wood with wire divisions. One quart size hold twelve bottles, one pint size holds twenty bottles.

Price, \$2.00 each; by mail, \$2.20.

## Farm Disinfectant



## Dairy Sterilizer

The powerful, clean, non-poisonous germ killer. The new and better way to sanitation. Based on sound scientific principles proved by war experience.

**STERILIZES**  
Milking Machines  
Pails, Cans  
Strainers, Cloths

**PREVENTION AND TREATMENT OF**  
Calf Scours,  
Retained Afterbirth  
Abortion

Ask for Bulletins on These Subjects

1 gallon jugs,	-	-	-	-	\$ 3.00
5 gallon jugs,	-	-	-	-	12.50



SUCCESSFUL FOR NEARLY FIFTEEN YEARS

Manufactured only by

GENERAL LABORATORIES,

Madison, Wis.

## Butter Carriers



These carriers are made of spruce and white wood and are very strong and durable, with trays so arranged that the butter is not marred in the least in handling. The ice box is made of metal, and has two compartments, the top for ice and the bottom for water as the ice melts, so that the ice is melted by air alone, thereby lasting much longer than if the ice rested in the water.

Each carrier is filled with long trays, and the capacity given is for prints of the standard creamery size.

Size	No. Trays	Without Ice Box					Price	By Mail
12 lbs.	4	10 $\frac{1}{4}$ x 7 $\frac{3}{8}$	inches, 1 $\frac{5}{8}$	inches deep, inside measure			\$3.25	\$3.45
24 "	4	10 $\frac{1}{4}$ x 14 $\frac{5}{8}$	" "	" "	" "	" "	4.00	4.25
32 "	4	10 $\frac{1}{4}$ x 18 $\frac{1}{2}$	" "	" "	" "	" "	4.25	4.55
40 "	5	10 $\frac{1}{4}$ x 18 $\frac{1}{2}$	" "	" "	" "	" "	5.00	5.35
48 "	6	10 $\frac{1}{4}$ x 18 $\frac{1}{2}$	" "	" "	" "	" "	5.50	5.85

Price, complete, with both long trays, and ice box and short trays for summer use.

24 lbs. (holding 16 lbs. butter, with ice attachment), \$5.75. By mail, \$6.10.  
 32 lbs. (holding 24 lbs. butter, with ice attachment), \$6.00. By mail, \$6.35.  
 40 lbs. (holding 32 lbs. butter, with ice attachment), \$6.75. By mail, \$7.20.  
 48 lbs. (holding 40 lbs. butter, with ice attachment), \$7.25. By mail, \$7.70.

The 12 lb. carrier, being very small, cannot be fitted with ice box.

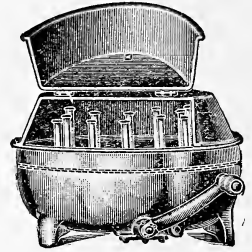
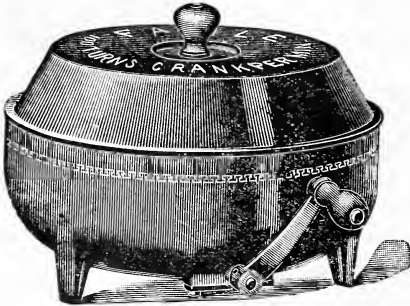
## The "Facile" Improved Babcock Milk Tester

The "Facile" Tester has taken the lead over all other Babcock machines, not only among creameries and cheese factories, but in state experiment stations and dairy schools. Several attempts have

been made to copy the machine, but so far nothing has been produced embodying all of its desirable features, and it remains today the leading Babcock machine.

Prices include full set of glassware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.

6 bottles,	\$19.25	10 bottles,	\$21.00
8 bottles,	20.50	12 bottles,	22.00



## The "Facile" Junior Babcock Milk Tester

The tester is similar to the above, but does not have the bottles inclosed in the metal case.

2 bottles .....	\$9.00	4 bottles .....	\$10.00
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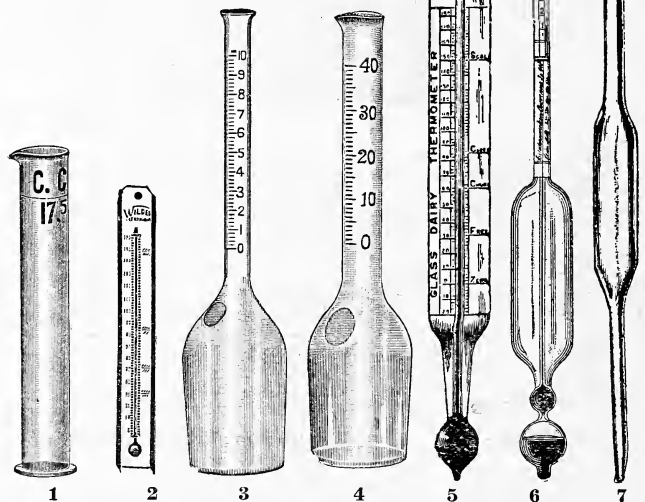
## Glassware for Babcock Test

	Each	By Mail
Lactometer (Fig. 6), for testing quality of milk.....	\$.75	\$.80
Floating Dairy Thermometer (Fig. 5).....	.50	.55
Flange Dairy Thermometer (Fig. 2).....	.50	.55
Babcock Test Bottles (for milk), 10 to 50% (Fig. 3)	.35	.40
Babcock Test Bottles (for cream), 50% (Fig. 4)....	.40	.45
Pipettes (Fig. 7) .....	.30	.35
Acid Measures (Fig. 1) .....	.25	.30

## Acid for Babcock Test

This acid is put up expressly for making Babcock tests, in 1 quart bottles, 1 gallon bottles or in carboys.

PRICES ON APPLICATION



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



## Milk Bottle Caps

No. 1, 1 $\frac{1}{8}$  inches in diameter, plain or printed caps, 50c per 1,000. By mail, 60c. In cases of 5,000, \$2.45 per case. By mail, \$2.70.

No. 2, 1 $\frac{1}{8}$  inches in diameter, and No. 3, 1 $\frac{3}{4}$  inches in diameter, plain or printed caps, 48c. per 1,000. By mail, 55c. In cases of 5,000, \$2.35 per case. By mail, \$2.60.

Special price on barrels containing 50,000 caps. Caps with lip, 4c per 1,000 extra.

Caps with special printing made to order.

## Wyandotte Dairymen's Cleanser and Cleaner

A powder especially compounded for use in the dairy and creamery for washing all dairy utensils, glass and tin ware, in a most satisfactory and sanitary manner. The use of this powder means absolute cleanliness. Price, 5 lb. bags, 40c.; by mail, 52c; 80 lb. kegs, \$5.33; 280 lb. barrels, \$15.16.

## Wells & Richardson Co.'s Dandelion Brand Butter Color

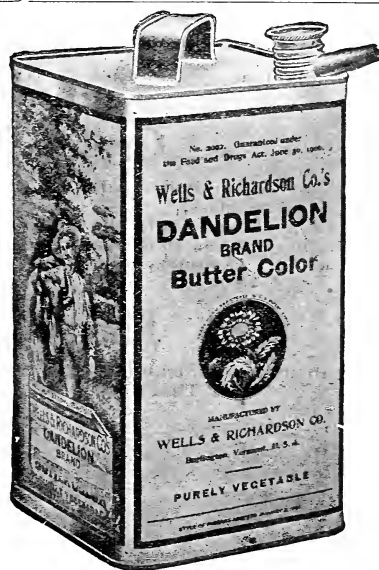
PURELY VEGETABLE

Will not become rancid. Will not color the buttermilk.

Gives a bright June color. Always gives satisfaction.

### PRICE

Small size, to color about 375 pounds,	\$ .35; by mail, \$ .42
Medium size, to color about 750 pounds,	.65; " " .72
Large size, to color about 1875 pounds,	1.00; " " 1.10
Cans, 1 gallon .....	4.50; " " 4.75



## Hansen's Danish Rennet Tablets

FOR CHEESE MAKING

Always of the same strength, entirely preservable, separates the cheese matter completely, and gives the greatest quantity possible.

Price—Package of 25 tablets, 75c.; by mail, 78c.

Can of 200 tablets, \$5.50; by mail, \$5.57.

## Hansen's Danish Butter Color

The Most Uniform, the Purest and the Most Natural Shade

Made with the finest imported vegetable oil.

To butter makers desiring a pure vegetable butter color, we do not hesitate to recommend Hansen's Danish as unquestionably the best in every respect.

Its high quality has never been approached by any competing preparations, and many shippers of the finest butter demand its exclusive use by their butter makers.



### Price List

Small size, to color about 400 lbs.,	\$ .35; by mail, \$ .42
Medium size, to color about 1000 lbs.,	.70; " " .75
Large size, to color about 2000 lbs.,	1.10; " " 1.20
Cans, 1 gallon .....	4.50; " " 4.75

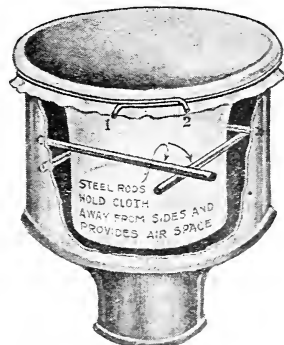
## The Horne Vertical Can Strainer

Is warranted to filter milk free from the slightest trace of sediment as fast as poured.

The milk begins to filter quickly and evenly in all directions the instant it is poured, and because of the vertical construction and large filtering area of the strainer there is no back pressure; consequently all foreign matter is caught on the vertical sides, and not forced into the milk.

Made of heavy charcoal tin, all inside joints thoroughly soldered and no angles for accumulation of filth.

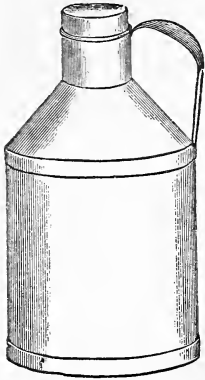
Price of strainer, complete..... \$2.50; by mail, \$2.62  
Price of filtering flannels, each.... .25; " " .28



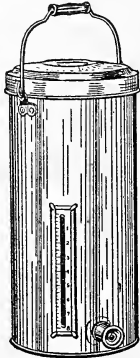
## Milk Cans

We can furnish tin, wood stopper Milk Cans, in any style, size or quantity; also 20 quart and 40 quart Shipping Cans, with either tin stopper or lock cover. The parts of all our Shipping Cans are made of steel and heavily tinned by the hand-dipping process after they are formed.

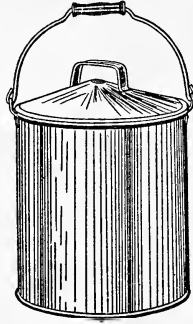
Prices Furnished on Application



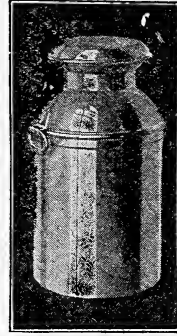
Milk Can



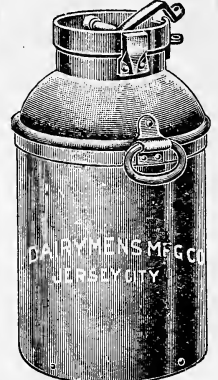
"K. & W." Can



Cream Pail



J. C. No. 120 Shipping Can, 20 and 40 Quarts



Lock Cover Shipping Can, 20 and 40 Quarts

## Cream Pails and Creamery Cans

Imperial Cream Pail, made like the "K. & W." Creamery Can, but without faucet or glass, - - - - -

6 Gallon Cream Pail, like cut, - - - - -

10 Gallon Cream Pail, like cut, - - - - -

"K. & W." Creamery Can, - - - - -

\$1.75 each; by mail, \$1.90

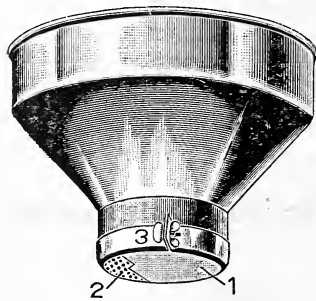
3.25 each; by mail, 3.42

5.00 each; by mail, 5.25

2.50 each; by mail, 2.65

## Horne's Seamless Milk Strainer

The Problem of Straining Milk as Fast as Poured and at the Same Time Remove Every Particle of That Fine Sediment Has Been Solved by HORNE'S Patented Process.



Why does milk strain in less than one-half the time by the Horne process? It is because all straining surface is OUTSIDE the outlet (see figure 1), making it impossible for the material to be forced into the perforations (see figure 2). The same material clamped between perforated metals inside the strainer will not strain milk freely, for the reason that after the first few pails are poured the material expands and must go where there is least resistance, which is, of course, into the perforations. This explains why you are having all kinds of trouble in not having your milk strained rapidly.

Sediment tests by the Horne process are warranted to be satisfactory to the most exacting health board, which is of the utmost importance in producing clean milk. The Horne process exactly reverses the method of straining milk (see figure 1) for the reason that the filtering pad is clamped OUTSIDE all perforations. This increases the actual straining area more than 100%, does not increase its diameter and every drop of milk must be strained absolutely clean. The last pail is warranted to strain as freely as the first.

Horne's combination filtering pads for which patent is pending, are composed of 7-inch square or round (6-inch if desired) absorbent cotton, reinforced on both sides with cheese cloth, making it impossible for the cotton to roll or separate. Absorbent cotton is admitted to be the ideal material for straining milk, but the great problem has been to have it properly adjusted between clamps, so as to avoid clogging or leakage.

### PRICES

Combination Pads, 7-inch	
60 to box	\$ .75; by mail, \$ .85
Combination Pads, 6-inch	
60 to box	.65 " " .75
Plain Cotton Pads, 7-inch	
(Same as you are using)	
60 to box	.55 " " .65
300 to box	2.50 " " 2.60
Plain Cotton Pads, 6-inch	
60 to box	.50 " " .60
300 to box	2.00 " " 2.10

Strainer Clamps		\$ .50; by mail, \$ .55
Any size		
10-Quart Strainer, complete	2.00 " "	2.15
12-Quart Strainer, complete	2.50 " "	2.65
16-Quart Strainer, complete	2.75 " "	2.90
18-Quart Strainer, complete	3.25 " "	3.40

## Champion Milk Cooler and Aerator

A perfect aerator, removing all flavors arising from excessive cabbage, turnip or silo rations.

A complete deodorizer, removing the animal heat or cowy taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

A thorough cooler, reducing the temperature of the milk in one minute nearly to the temperature of the cooling medium.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or, if a very low temperature is not required, ordinary well or spring water.



No.	Capacity of Milk Receiver	Size of Dairy	Takes Care of	Price
2.	18 quarts	10 to 25 cows	3 milkers	\$ 9.50
3.	34 "	25 to 50 "	5 "	11.25
4.	52 "	50 to 100 "	8 "	14.00

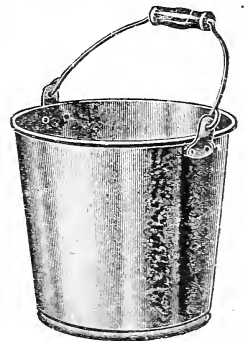
## The Eureka Sanitary Pail

WITH REMOVABLE STRAINER

Strains Rapidly and Thoroughly

Sediment does not collect on the strainer, but passes beyond and is removed when the strainer is taken out.

Price, 14 quart, \$3.25; by mail, \$3.35.



## Plain Milk Pails

1X	10 qt.	.....	\$ .55; by mail, \$ .70
1X	12 qt.	.....	.60; " " .75
1X	14 qt.	.....	.65; " " .80
2X	10 qt.	.....	.65; " " .80
2X	12 qt.	.....	.85; " " 1.00
2X	14 qt.	.....	1.00; " " 1.15

THE NEW DOVER

## Sanitary Milk Pail

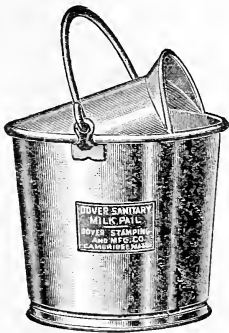
The Best Milking Pail on the Market

Note the guard, which absolutely prevents dirt from falling from the rounded breast into the pail.

The body is in one piece, has only one seam, and the pail is made of extra heavy, high grade charcoal tin plates. Every seam and crevice is smoothly soldered inside and outside, preventing dirt collection and making cleaning easy.

Many dairymen do not like to pour from a pail on the side which they milk in, on account of more or less dirt and dust which is apt to be on that side of the pail. Always pour from the Dover pail in the following manner: Have the pail opening face you; grip bottom of pail under said opening and pour over the top of the breast; the guard on the breast acts as lip.

Price, \$3.00; by mail, \$3.15.

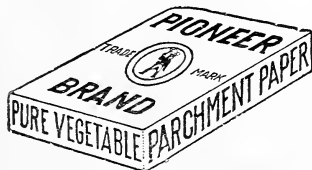


## Pioneer Brand Parchment Butter Paper

Guaranteed to Contain No Oil, Grease, Paraffine or Wax

Are you getting the best price for your butter? Try wrapping it in Pioneer Butter Paper, which completely protects it from all injurious odors, preserves the delicious flavor, and prevents the prints from becoming damaged in handling.

**WE RECOMMEND**—Before you wrap butter, wet parchment thoroughly in clean, pure water, add salt if you prefer. It means better wrapping; it means better protection.

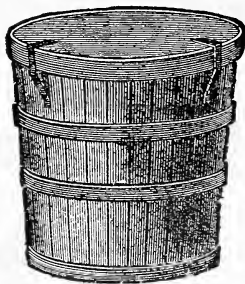


**PRINTED PAPER**—Printed to comply with the law requiring the weight of the butter to be marked on the container. **SOLD IN PACKAGES ONLY.** Price, package, 7x9 (1/2 pound size), 5 pounds, \$1.75; by mail, \$1.88. 9x12 (1 pound size), 7 pounds, \$2.45; by mail, \$2.60.

Price, plain paper, 30c. per pound; by mail, 38c.

Write for quotations for large quantities and for printing special designs.





## Butter Tubs

We are in a position to furnish superior spruce butter tubs in any quantity desired. Tubs are kept in stock in 10, 20, 30 and 50 pound sizes, and shipments can be promptly made. Special prices for large quantities.

Write for quotations.

## Tub Cover Fasteners

Made from tin; easily applied, easily withdrawn. Tin is turned back over head of nails; impossible for nails to drop out.

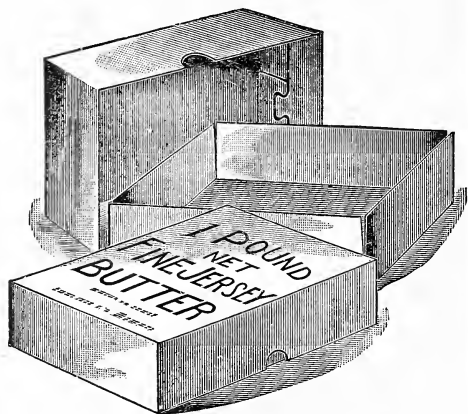
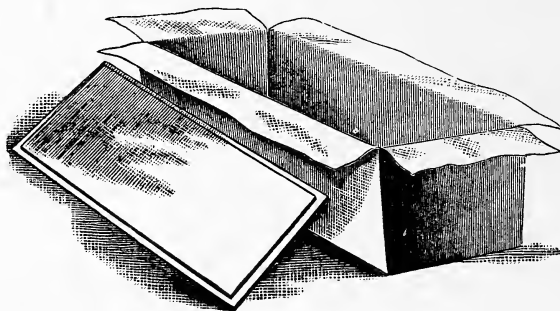
1,000 in a package. Price, \$1.50 per thousand; by mail, \$1.60.

## Improved Oblong Butter Box

WITH PARCHMENT LINING

The box holds five pounds of packed butter, is nearly brick shaped, flaring so the butter will turn out, and is in the best possible shape to cut up for the table in square-like prints and free from waste.

Price, \$1.85 per crate of 12 boxes.



## One Pound Folding Paraffined Paper Butter Boxes

ODORLESS AND TASTELESS

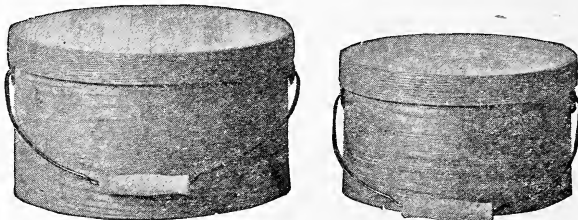
Price, \$1.40 per 100; \$12.50 per 1,000.

By mail, \$1.54 per 100.

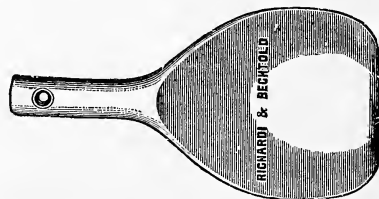
## PRICE CHANGES

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Oak Bail Boxes



Price, 8 qt., 95c.; by mail, \$1.05; 4 qt., 70c.; by mail, 78c.



Butter Ladles, 15c.; by mail, 18c.



Creased Butter Spades, 15c.; by mail, 18c.



Plain Butter Spades, 12c.; by mail, 15c.

## Small's Calf Feeder

This is a device by which the calf may be fed away from its dam, and with any mixture of milk (or whatever else is healthful and desirable) with convenience and in the natural way, with that admixture of saliva which does not occur when calves drink from a pail.

Price, \$3.75; by mail, \$3.85. Extra Nipples, 25c each; by mail, 27c.

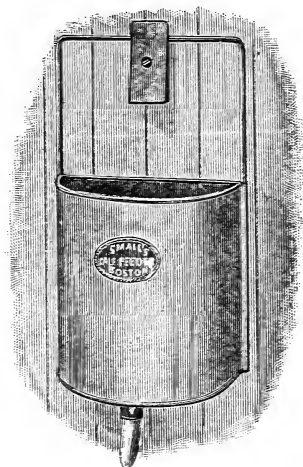


## Rice's Weaner

For preventing calves and cows sucking themselves or each other.

### PRICE

No. 1, for calves, 45c.; by mail, 48c.  
No. 2, for heifers, 70c.; " " 73c.  
No. 3, for cows, 90c.; " " 95c.



## Kow-Kare, Garget Remedy and Bag Balm


**The Cow's Health - First of All**

To think of the milk yield first and the cow's health afterward is putting the cart before the horse. Many "poor milkers" only need to have their systems working properly to become good producers.

KOW-KURE, the great cow medicine, makes cows healthy and keeps them healthy. Working on the digestive and genital organs, it is a prompt, sure remedy for Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite and Bunches. Try KOW-KURE; druggists and feed dealers sell it—

Write for "The Home Cow Doctor," free.

DAIRY ASSOCIATION CO.,  
Lyndonville, Vt.



Price, Kow-Kare, 65c. and \$1.25 per can; by mail, 75c. and \$1.37.

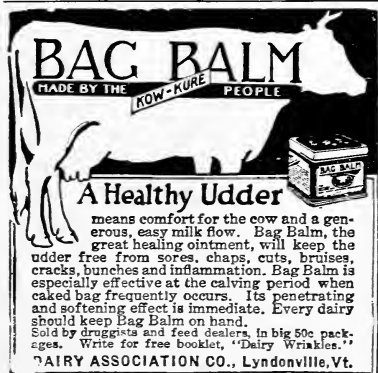
## Grange Garget Remedy



Positively cures garget without in any way injuring the cow.

Price, 65c per can.  
By mail, 75c.

**BAG BALM**  
MADE BY THE KOW-KURE PEOPLE



**A Healthy Udder**

means comfort for the cow and a generous, easy milk flow. Bag Balm, the great healing ointment, will keep the udder free from sores, chaps, cuts, bruises, cracks, bunches and inflammation. Bag Balm is especially effective at the calving period when caked bag frequently occurs. Its penetrating and softening effect is immediate. Every dairy should keep Bag Balm on hand. Sold by druggists and feed dealers. In big 50c packages. Write for free booklet, "Dairy Wrinkles."

DAIRY ASSOCIATION CO., Lyndonville, Vt.

Price, 60c. per can; by mail, 65c.

## Cow's Relief

A standard remedy among dairymen.

A sure relief for caked udder, and will keep bag and teats free from soreness.

### PRICE

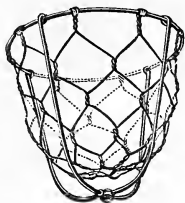
Two Sizes

50c per can,  
By mail, 55c.  
\$1.00 per can,  
By mail, \$1.08



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## Ox Muzzles



Small, per pair..... \$ .65  
By mail, .75  
Large, per pair..... 1.00  
By mail, 1.10

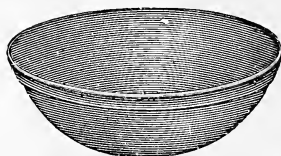
## Cow Bells



No. 1.....70c.; by mail, 80c.  
No. 2.....55c.; " " 65c.  
No. 3.....50c.; " " 60c.  
No. 4.....45c.; " " 55c.

## Wood Bowls

Oiled



11 inch, \$ .30; by mail, \$ .40  
13 " .70; " " .83  
15 " .95; " " 1.10  
17 " 1.60; " " 1.75  
19 " 2.00; " " 2.25

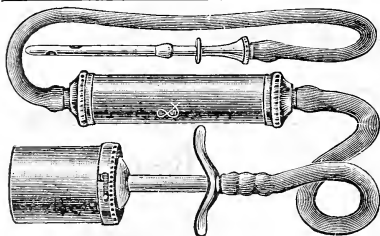
## Ox Balls

Made of brass in three sizes.

Prices ..... 8 cents to 15 cents each  
By mail ..... 10 cents to 12 cents each

## Bull Rings

2½-inch copper..... 35 cents; by mail, 38 cents  
3-inch copper..... 40 cents; by mail, 43 cents



## The Pilling Milk Fever Outfit

FOR STERILIZED AIR TREATMENT

This Treatment Has Cured 97 Per Cent. of All Cases Treated.  
Recommended by the Bureau of Animal Industry of the  
United States Government Department of Agriculture.

The outfit consists of the instrument, a roll of tape, a pack-  
age of carbolized cotton and full directions.

Price, \$3.00; by mail, \$3.08.

## Pilling Lead Probe

With Full Directions.

For the treatment of obstructed teats, also for enlarging the opening.

Price, 25 cents; by mail, 27 cents.



## Pilling Teat Expander

FOR HARD MILKING COWS

Price..... 50 cents; by mail, 52 cents

## Pilling Hard Rubber Teat Plug

Especially designed for two purposes. First, to prevent dropping of milk  
in cows where there is relaxation of the little muscle at the end of the teat  
and consequent leakage of milk; and secondly, to dilate the canal of the  
teat above the muscle in cases where hard milking is due to contraction  
of this part of the canal.

Price, 50 cents; by mail, 52 cents.



## Milking Tubes



For drawing milk from cows with sore or obstructed  
teats. Made from white metal, in 2½ and 3½ inch  
lengths, heavily plated with pure silver and warranted  
equal to solid silver ones in every respect, at about one-  
fourth the cost.

Price, 25 cents; by mail, 27 cents.

The prices listed in this catalog are made in good faith and it is our desire that they be main-  
tained as firm figures in making up your order. There are rare cases, over which we have no control,  
by reason of a decrease or advance of cost from the manufacturers, and we trust that you under-  
stand the meaning of the phrase "Prices are subject to change without notice."

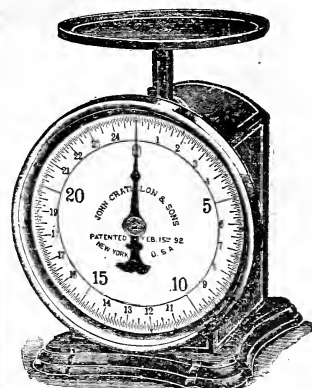
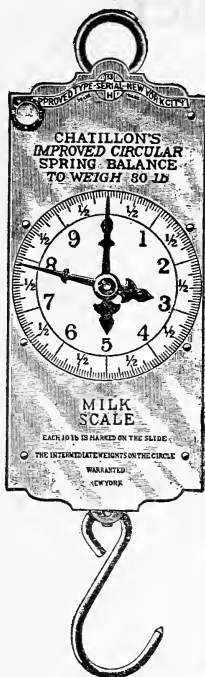
## Improved Circular Spring Balance Milk Scales

USED BY MOST DAIRYMEN

Graduated on dial into 1-10 pound.

No. 270. Weighing up to 60 pounds,  
\$7.50; by mail, \$7.60

No. 260. Weighing up to 30 pounds,  
\$6.50; by mail, \$6.60



## Favorite Family Scales Dial and Glass Sash, Handsomely Ornamented

The pointer may be adjusted to balance the weight of a scoop, etc., by turning the thumb-screw on top of scale.

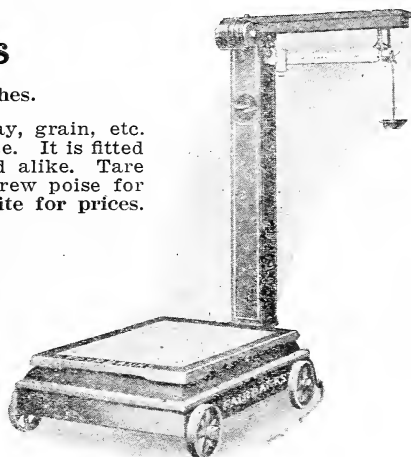
PRICE

No. 047. Complete with scoop, white dial.....\$5.75; by mail, \$5.90  
No. 147. " " " tin dial ..... 4.50; by mail, 4.65

## Fairbanks Platform Scales

Capacity, 500 lbs. by  $\frac{1}{2}$  lb. Platform, 16 by 25 inches.

This is a convenient scale for weighing cans of milk, hay, grain, etc. Being mounted on wheels, it is easily moved from place to place. It is fitted with brass arrow, double beam, both beams being graduated alike. Tare may be taken up on the lower beam. Equipped with set-screw poise for locking in place. May be had also with single beam. Write for prices.



## Rat-Tox

Tasty bait and powerful poison combined. Ready to use. A nibble kills a rat.

Price, 50c.



Rat corn kills rats, mice, gophers, prairie dogs, squirrels and other rodents, without odors. Mumifies them and they simply dry up. Is not a deadly poison, therefore can be used without danger to human beings. Keep away from fowl.

Prices, 25c., 50c. and \$1.00 per can.  
By mail, 30c., 55c. and \$1.05.

## RED WING POWDER



For the destruction of Roaches, Flies, Bed-Bugs, Moths, Cockroaches, Ants, Fleas, etc. Harmless to Mankind and Animals

Red Wing Powder, in the round bellows, 10c. & 25c.  
By mail, 15c. and 30c.

# Sherwin-Williams Products Insecticides

## Pine Tree Potato Spray

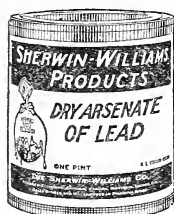


A Mark  
of  
Quality

This has been prepared especially for use in Maine on the potato crop. It is the result of several years of study to get an insecticide which will stick well to the foliage, will kill quickly and yet not burn, and will sell at a low price. Pine Tree Potato Spray does all of these. Put up in a 3 pound package, which is just the amount for a 100 gallon tank. Use with Bordeaux mixture or lime.

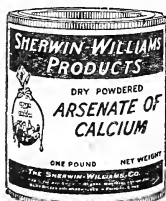
Price, 25c. per pound. Write for prices on large quantities.

## S-W Dry Powdered Arsenate of Lead



One of the oldest and most effective insecticides on the market, and can be used for spraying all kinds of fruit with perfect safety. Contains from 30 to 33 per cent. arsenic oxide thoroughly in combination with lead and less than 1 per cent. water soluble arsenic. This means unquestionable effectiveness without danger of burning foliage. S-W Arsenate of Lead is extremely fluffy, therefore covers more foliage and stays in suspension longer than most leads on the market. Can also be dusted. For general spraying 1 to 1½ pounds to 50 gallons of water will be found very effective. Put up in ½ lb., 1 lb. and 4 lb. pkgs.

## S-W Dry Powdered Arsenate of Calcium



Especially valuable as a spray to control the "potato bug" and many other chewing insects of vegetable crops. Contains more than 40 per cent. of arsenic oxide, and therefore has a killing efficiency surpassed only by Paris Green. It is more effective and economical than Sodium Arsenate as a potato spray. Considered by the United States Department of Agriculture as a high grade Arsenate of Calcium. Use at the rate of ¼ to 1 pound to 50 gallons of water. 1 lb., 5 lb., 25 lb., 50 lb. and 100 lb. pkgs.

## S-W Paris Green



One of the oldest and most reliable Paris Greens on the market. Its high quality is recognized everywhere, and many years of use have proven its efficiency. Very light and fluffy, insuring good suspension in the spray tank and thorough covering of the foliage. Contains approximately 56 per cent. arsenious oxide and less water soluble arsenic oxide than is allowed by the law, so carefully combined that danger of burning is reduced to a minimum. In using Paris Green conditions vary greatly, but for general purposes 1 to 3 pounds to 50 gallons of water is very satisfactory. Put up in ¼ lb., ½ lb., 1 lb. pkgs.

## S-W Fungi Bordo



A well-balanced dry Bordeaux mixture containing 50 per cent. of blue vitriol and 50 per cent. of lime. It is the only well-balanced Bordeaux prepared mixture on the market. It will not deteriorate and will give effective results.

Fungi Bordo will prevent potato blight, apple scab and other fungous diseases controlled by Bordeaux mixture.

To produce a 3-3-50 Bordeaux mixture use 6 pounds to 50 gallons of water; for a 4-4-50 formula use 8 pounds to each 50 gallons of water. Put up in 1 lb., 5 lb., 25 lb., 50 lb. and 100 lb. pkgs.

## S-W Dry Lime Sulfur



The original Dry Lime-Sulfur and the only one that has been thoroughly tested and approved by state experiment stations. It is also used by many of the largest fruit growers in New England. Protected by U. S. patent No. 1,254,908.

S-W Dry Lime-Sulfur is 33 degrees Beaume Lime-Sulfur Solution with the water extracted. Its use eliminates all losses due to leakage and freezing. Handling and freight costs are reduced 80 per cent.

For dormant spraying on apples, pears, plums and cherries, use from 12 to 15 pounds to each 50 gallons of water. For summer spraying of apples and pears, use 3 to 4 pounds to each 50 gallons of water. As a summer spray on plums and cherries, use 3 pounds to each 50 gallons of water. Use the customary proportion of Dry Arsenate of Lead. Put up in 1 lb., 5 lb., 10 lb., 25 lb., 50 lb., 100 lb. and 200 lb. pkgs.

## KAYSO Spreads the Spray and Makes It Stay



— for orchard  
and garden sprays

Kayso gives complete coverage of Lime Sulfur or Bordeaux on opening buds, unfolding leaves and blossoms. This means the greatest protection against scab, brown rot or other fungus infection. It causes the spray to dry quickly in a durable coating and enables the orchardist to get the greatest benefit from sprays that are applied in rainy weather; makes the delayed dormant spray of Lime Sulfur and Nicotine Sulfate of highest effectiveness against aphids, psylla, red bug and thrips, because it spreads the Nicotine and makes it stick; greatly retards chemical reaction between Lime Sulfur and Arsenate of Lead; makes Nicotine Sulfate really effective when combined with Arsenate of Lead, for it liberates the Nicotine and spreads it over the insects; makes the spray cover smooth bark in a durable coating and spreads it into cracks and crevices where San Jose scale and similar pests seek protection. Use 1 pound to 100 gallons of spray mixture.

**POTATO GROWERS:** Kayso will spread your sprays and make them stick, rain or shine.

100 lb. sack, 18c. per lb.; 50 lb. sack, 19c. per lb.; 10 lb. sack, 21c. per lb.; trial size can, 25c.

### Bug Death

The insecticide which contains no arsenic or Paris Green and is the one insecticide on the market absolutely harmless to animal life, which will kill the bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality and promote the vigor of the plant or tree.



1 lb. pkg., 20c., by mail, 28c.; 3 lb. pkg., 40c., by mail, 50c.; 5 lb. pkg., 60c., by mail, 62c.; 12½ lb. pkg., \$1.50, by mail \$1.70; 100 lb. keg, \$8.50.

### Bug Death Alpha

**A Non-Arsenical Insecticide and Fungicide for Many Plant Eating and Sucking Insects**

For sucking insects, lice, aphids, flea beetles and fungus this preparation is offered with full confidence in its protective as well as destructive power. There is no place where it can work injury, its sole mission being to protect and save. For the currant worm, the flea beetle, the rose or tree aphid, as well as other forms, its destructive power is assured. The housewife will here find the ideal agent to use for the health of all house plants, and the greenhouse worker be assured security from all necessity for using any of the arsenical preparations; the orchardist find here the ideal dust for his trees, carefully mixed, ready for use; the gardener be insured against attacks from those pests and diseases which so often work serious injury.

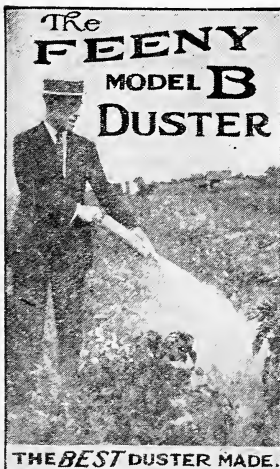
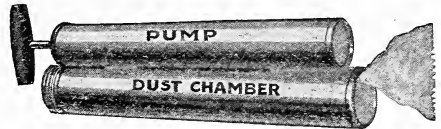
12 oz. pkg., 20c.; 80 lb. drum, \$8.50.

## Double Tube Hand Duster

Light Weight. Low Priced. Durable.

Excellent for dusting gardens, flowers, bushes, trees and poultry houses. Handles Arsenate of Lead, Calcium, Paris Green, Sulphur and other dusts perfectly.

Price, 75c each. By mail, 85c.



### Feeny Model B Duster

This duster has been thoroughly tried out during the last few seasons and has proved itself to be the best of its kind on the market. It will dust any kind of dry powder and will distribute the powder in any quantity one may wish. The duster is very light, compact, and thoroughly made.

Price, \$1.25 each.  
By mail, \$1.35 each.

### B-D Sifter

Price, - - - 75c

By mail, 85c.



### Dickey Bug Death Duster



Price, - - - 55c.; by mail, 65c.



## “Black Leaf 40”

To Destroy Green and Rosy Apple Aphis, Woolly Aphis, Cabbage Aphis, Lice on Fruit Trees, Shrubs, and on Garden and Sweet Peas, and All Forms of Soft-Bodied Sucking

Insects, without Injury to Foliage, Spray with

### “Black Leaf 40,” Sulphate of Nicotine

“Black Leaf 40” is highly recommended by experiment stations and spraying experts throughout the entire United States. Owing to the large dilution, neither foliage nor fruit is stained. Also “Black Leaf 40” is perfectly soluble in water—no clogging of nozzles.

Price: 10 lb. can, \$13.50 (makes 1,600 to 2,000 gallons for spraying tree lice, with the addition of 2% distillate oil emulsion; or 1,000 gallons for spraying green and woolly aphids, with the addition of three or four pounds of any good laundry soap to each 100 gallons of water); 2 lb. can, \$3.50; ½ lb. can, \$1.25; 1 oz. package, 35c.

### Fish Oil Soap

This is a most effective and cheap remedy for destroying San Jose scale, oyster shell scale, plant lice and sucking insects on trees, shrubs, plants, vines, rose bushes, etc.

Price, 1 lb. box, 35c.; by mail, 42c.

### Nico-Fume Liquid

A highly refined tobacco extract, containing 40% “free” nicotine, which may be used both for spraying and for fumigating.

Price, ¼ lb. can, 75c.; 1 lb. can, \$2.25; 4 lb. can, \$8.00; 8 lb. can, \$15.00.

### Nico-Fume Tobacco Powder

For fumigating greenhouses. 12½% nicotine. About three heaping teaspoonfuls for 5,000 cubic ft. 1 lb. cans, \$1.75; 5 lb. cans, \$4.75; 10 lb. cans, \$8.50

### Aphine

Not a cure-all, but a specific remedy for sap-sucking insects infesting plant life, such as green, black or white fly, thrips, red spider, mealy bug and soft scales.

Price, ¼ pt., 25c.; ½ pt., 40c.; 1 pt., 65c.; 1 qt., \$1.00; 1 gal., \$3.00.

### Hellebore

Will be found satisfactory for use against rose slugs, currant worms, cabbage worms and many other leaf-eating insects, where a milder poison than Paris Green or Arsenate of Lead is desired.

Price, ½ lb., 25c.; 1 lb., 45c.

### Gypsy Moth Creosote

This creosote is prepared especially for painting the gypsy moth egg clusters, so as to destroy the eggs before they hatch.

Price, 1 qt., 50c.; 1 gal., \$1.25.

### Kerosene Emulsion

A valuable remedy against scale, plant lice, etc.

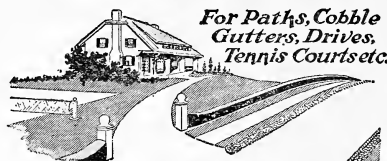
Price, pt. can, 30c., by mail, 37c.; 1 qt. can, 50c., by mail, 60c.; 1 gal. can, \$1.50, by mail, \$1.60.

TOBACCO DUST—Price, 1 lb. package, 20c.; by mail, 27c.; in bulk, 10c. per lb.

TOBACCO STEMS—Price, \$2.00 per 100 lbs.

## “HERBICIDE”

THE WEED EXTERMINATOR



Gets rid of weeds the permanent way. Is quickly and easily applied. One application kills both tops and roots.

Price, 1 qt., 70c.; 2 qts., \$1.10; 1 gal., \$1.75; 5 gals., \$7.50.

### Bordeaux Mixture

Bordeaux Mixture is a preventive of potato blight, potato rot, mildew, leaf blight of shrubs and fruit trees, and, in fact, for all fungoid diseases. Apply as a fine spray to all parts of the plants liable to be affected.

Price, 1 qt., 60c.; 1 gal., \$1.75; 5 gal. cans, \$6.00.

### Stanley's Crow Repellent

WHAT IT DOES

It rids your corn crop of crows and other corn pulling birds, and animal pests, such as moles, gophers, woodchucks, squirrels, etc. Saves loss of seed and labor of replanting. Positively will not clog any planter. Aids and hastens germination of seed corn. Protects seed from rotting in the ground. Insures larger yield per acre. Is non-poisonous and will not injure the seed. Will not kill birds or animals, but will keep them away and prevent destruction by them. Has been used successfully by experienced corn growers for over ten years.

Small can, for 1 bushel, \$1.00; by mail, \$1.07

Large can, for 2 bushels, 1.50; by mail, 1.58

## Tree Tanglefoot

A safeguard for trees against the gypsy moth, canker worm, and all climbing insect pests. It should be applied before the foliage appears, a continuous band two inches in width being put around the trunk of the trees three or four feet from the ground. One pound will make a band seven to nine feet long. Perfectly harmless to the trunk (unless where the trees are very young and the bark thin and tender, in which case bind manila paper around the trunk before applying Tanglefoot) and remains sticky during hot, cold or wet weather.

Prices: 1 lb. can, 60c.; 5 lb. can, \$2.75; 10 lb. can, \$5.25; 20 lb. can, \$8.00; 25 lb. can, \$11.00.

## Insect-Ban Tree Tape

**PROTECTS FRUIT AND ORNAMENTAL TREES From Caterpillars, Worms, Insects and All Crawling Pests.**

A tape saturated with a powerful **Insect Repellent**. The shield protects the tape from the weather. No caterpillar, worm or insect can pass it. Not injurious to man, bird, animal or any lung-breathing organism.

**Shipped in rolls. The user cuts to suit and bands the tree trunk.**

**LASTS A SEASON—PROTECTS FOR A SEASON**  
Price, 30 foot roll, \$1.50 prepaid.

## Pratt's Dip and Disinfectant

For sheep, horses, hogs, cattle, poultry; for the relief of ticks, scabs, lice, mange, etc. Ready for use by adding water.

Prices: 1 quart, 55c.; 2 quarts, 90c.; 1 gallon, \$1.50.

**Pyrox**  
REG. U. S. PAT. OFF.  
TRADE MARK REGISTERED

The one best spray for potatoes, tomatoes, all other vegetables, grapes, strawberries, other small fruits, shrubs, roses and other flowers. It kills bugs, prevents fungous diseases and invigorates the foliage, thus increasing the yield. Easy to use—simply mix with water and spray through the finest nozzle. It will stick like paint.

1 lb. size, 50c.; 5 lb. size, \$1.75; 10 lb. size, \$3.00; 25 lb. size, \$6.25; 50 lb. size, \$10.75; 100 lb. size, \$15.50.

The Pyrox Spray Guide contains valuable information. Be sure to ask for it when you order.



## Niagara Dusting Material

### STANDARD MIXTURES

Code No.	Name	PRINCIPAL INGREDIENTS	Cost Per Cwt.	GENERAL USE.
215	Super-Sulfo-dust	Dusting Sulphur with special spreader and stick. Fineness 98%, 300 mesh.	\$4.35 (in bags)	An Improved Sulphur Fungicide without poison for Apple Scab Brown Rot, etc. Also used in the South for Rust Mite and Red Spider.
216	Kolodust (Patented)	A new patented dusting Sulphur of infinite fineness. A dust you can see stick.	\$5.19 (in bags)	The New Exclusive Niagara Sulphur Fungicide without poison for Apple Scab, Brown Rot, etc.
125	Fruitex Dust	Sulphur and Lead Arsenate Mixture.	\$8.35	For Diseases of Apples, Pears, etc.; Codling Moth, Strawberry Weevil, etc.
217	Kolotex (Patented)	A mixture of Kolodust and Lead Arsenate. A dust you can see stick.	\$8.00 (in bags)	The New Exclusive Niagara Sulphur Fungicide with Lead Arsenate for Diseases of Apples, Pears, etc.; Codling Moth, Strawberry Weevil, etc.
206	A-1 Mixture	High percentage of quickly volatile nicotine fumes. 3 per cent actual 100 per cent Nicotine.	\$15.60 (in metal drums)	For Aphids, Red Bug, Pear Psylla, etc. The best contact dust for sucking insects.
136	D-6 Mixture	Dehydrated Copper Sulphate 20 Per Cent (as Copper Sulphate Crystals 26.7%) Lime and filler.	\$7.60 (in metal drums)	Standard Copper Fungicide without poison for potatoes, celery, and other vegetable crops.
189	D-20 Mixture	Dehydrated Copper Sulphate 20 Per Cent, (as Copper Sulphate Crystals 26.7%) Calcium Arsenate (Poison) 20 Per Cent, Lime and Filler.	\$9.80 (in metal drums)	Standard Copper Fungicide with poison for Potato Bugs and Blight.

Prices on Packages of less than 100 lbs. as follows:

50 lbs. add to base price as listed above.....	1c per pound
25 lbs. add to base price as listed above.....	3c per pound
10 lbs. add to base price as listed above.....	4c per pound



## Fly Spray

A NEW AND DIFFERENT FLY SPRAY

It kills flies—really protects the cow, and helps the farmer make more money. It's what the farmer has been looking for in fly sprays. Knox-Out is built on a different idea and we publish a booklet telling exactly how to use it. Every consumer gets one. We have so much confidence in it that we sell it under a money back guarantee.

K-O has the following outstanding characteristics:

1. No bad odor.
2. Clean, clear, light color.
3. Is not sticky.
4. Will not taint milk.
5. Will not discolor cattle.
6. Will not burn cattle.
7. Does not gum hair.
8. Will not clog sprayer.
9. Costs no more than others.
10. Sold on money back guaranty.
11. Ingredients will not separate.
12. Not made of any by-products, contains no tar oil, or sheep dip.
13. Ingredients 100% active—no inert material.

Price, \$1.50 per gallon

## Key Brand Ant Killer

For use on lawns, sport and golf courses, etc. Sprinkle a small quantity of Key Brand Ant Killer around the ant hills. The ants carry the preparation into their hills where they eat it and die. A very small quantity will quickly kill an entire colony.

Price, 4½ oz. can, \$ .50

## Scalecide

THE COMPLETE DORMANT SPRAY

Scalecide is a miscible oil spray for destroying scale, and used as a dormant spray is a very effective control for European Red Mite, Aphids, Red Bug, Leaf Roller, and other insect pests. Because of its oily nature Scalecide spreads in a thin film and penetrates into cracks without the aid of a spreader. Use 1 gallon to 15 gallons of water.

1 qt., \$ .75; 1 gal., \$1.75; 5 gal., \$6.25; 10 gal., \$10.60; 15 gal., \$13.50; 30 gal., \$26.00; 50 gal., \$38.00.

Allowance of \$2.00 for 15 gal. drums if returned freight paid to factory.

## Creonoid

LICE DESTROYER AND COW SPRAY

A most efficient spray to protect cattle and horses from flies. Antiseptic and non-poisonous. Used in hen houses to kill lice.

Flies breed in manure heaps and go from place to place carrying disease germs along with them. Flies are responsible for many of the epidemics that appear among people and animals.

If their breeding places are regularly sprayed with Creonoid they cannot breed and the number around the buildings will be greatly diminished.



Price, per gallon, \$1.25

## Soiltex

Do you want to know which fields need lime? How much they need? With Soiltex you can make your own test, and at a cost of less than two cents. Only a minute or two required for each sample.

Price \$1.00 sent prepaid

## Cyanogas

A new chemical insecticide which is rapidly coming into favor.

Grade G is prepared especially for greenhouse work, is very simple to use, and not dangerous if used according to directions.

Grade A is prepared for outside work, such as destroying ants, rats, moles, woodchucks, and other pests.

Prices: 1 lb. can \$ .75, 5 lb. can \$2.75, 25 lb. can \$9.00.

## Key Brand Ansect

(ROSE BUG DESTROYER)

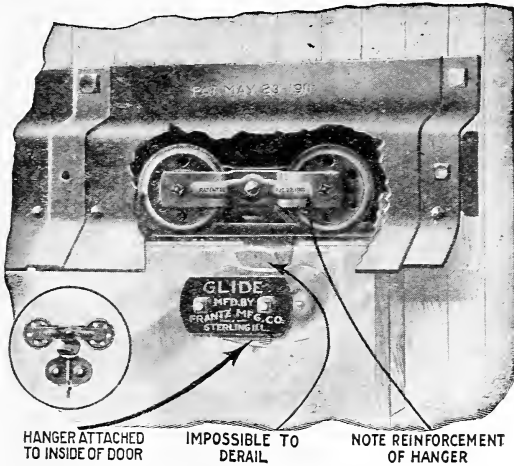
Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Use 1 part in 30-50 parts of water. Thorough spraying is essential.

Price, 4 oz. can, \$ .30

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## “Glide” Door Hanger and Track

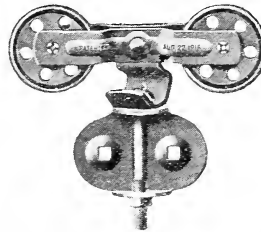
The ORIGINAL Watershed Construction. A Combined Track and Cover IN ONE PIECE. Absolutely bird-proof. Impossible to derail hanger.



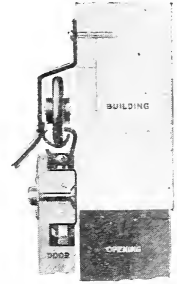
HANGER ATTACHED TO INSIDE OF DOOR

IMPOSSIBLE TO DERAIL

NOTE REINFORCEMENT OF HANGER



No. 2 “GLIDE” HANGER



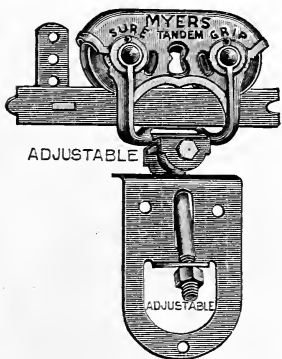
Sectional View, No. 2 “GLIDE” HANGER AND TRACK

“Glide” Hangers require no lateral adjustment, as they are fastened to the inside face of door, and all doors are carried just the right distance from the building. Hence the necessity for lateral adjustment is avoided. There are times, however, when a vertical adjustment is desirable, which is the reason for building this construction.

Packed one pair in a box, with bolts, lags, socket wrench, name plates, directions, end stops for track and steel adjusting wrench, also paper template for guidance in attaching to door.

“Glide” Track is made in 4, 6, 8 and 10 foot lengths.

## Myers Sure Grip Adjustable Tandem Door Hangers



This hanger is adjustable in all parts. The perpendicular and lateral adjustments are made with an ordinary wrench and at the will of the user. It has hard steel roller bearings and will fit any thickness of door. The track is heavy special high carbon stiff steel, 3-16 x 1 1-4 inches, supported by rigid brackets with a square shoulder mortised through the track.

Price on application.

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## Sprayers

For Spraying All Insecticides on Potato Vines, Shrubs, Small Trees, House Plants, Live Stock and Poultry

### Acme Compressed Air Sprayer

This is one of the best constructed, most effective compressed air sprayers ever developed, made with either galvanized or brass tank 7 inches in diameter, 20 inches high, and 4 gallon capacity, tested to 60 pounds air pressure. Has an inside pump with seamless brass cylinder 15 inches by 1 3/4 inches, fitted with a brass valve and sealed into top of the tank with heavy threads. Pump is easily removed for filling.

No. 345, Galvanized Tank. No. 346, Brass Tank.

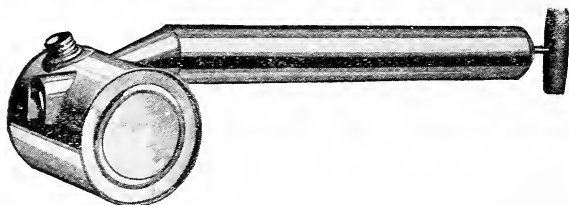
Prices on application.



### Acme Fog



Conical reservoir provides great strength and prevents displacement of spraying tubes adjustment. Capacity, quart. Air chamber, 1 1/2 x 1 1/4 inches. Tank, 6 inch bottom diameter. Heavy galvanized. 50 cents each.



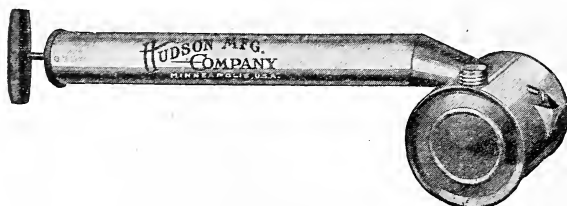
### Acme Perfect

Capacity, quart. Air chamber, 1 1/2 x 1 1/4 inches. Tank, 4 inches in diameter, 4 1/2 inches long.

No. 326, 40 cents each.

### Acme Invincible

Strong, compact sprayer with cone end air chamber. Capacity, pint. Air chamber, 10 x 1 1/4 inches. Tank, 3 inches in diameter, 3 inches long. Style, heavy, bright tin. No. 350, 35 cents each.



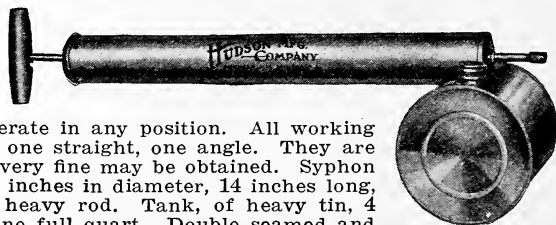
50 cents each

### "New Misty"

Will apply the finest possible spray on any object desired, and exterminate any kind of insect life. Quart size sprayer made of selected stock and carefully tested before packing. The method of construction, with the pump passing through the top of the can, keeps the air nozzle and spray tube in a straight line, and adds to the strength of the entire sprayer. Pump is 1 3/4 inches in diameter, 14 inches long. Tank is 4 inches in diameter, 4 1/2 inches long. All seams locked and soldered.

### "Continuous" Sprayer

This sprayer is a popular pattern because it delivers a fine, even spray continuously. It will handle all soluble solutions—chemicals, insecticides, disinfectants, etc.—in a practical and satisfactory manner. Construction permits it to operate in any position. All working parts are brass. Two nozzle caps are furnished, one straight, one angle. They are adjustable so that any spray from very coarse to very fine may be obtained. Syphon tube and check valve are removable. Pump, 1 3/4 inches in diameter, 14 inches long, fitted with Hudson cupped plunger leather and heavy rod. Tank, of heavy tin, 4 inches in diameter, 4 1/2 inches long. Capacity, one full quart. Double seamed and thoroughly soldered throughout. 75 cents each.



NO. 22 BANNER

## Compressed Air Sprayer

This sprayer is adapted for all spraying purposes. It cannot be excelled for spraying garden vegetables, plants, shrubbery and flower beds, disinfecting poultry houses, stables, cellars, etc.

Tank: 21 inches by 7½ inches.

Capacity: About 4 gallons.

Tank: Double seamed and well riveted.

Pump: Seamless brass, 2 inches in diameter.

Pump castings: Heavy brass.

Hose: 2 feet, 5 ply.

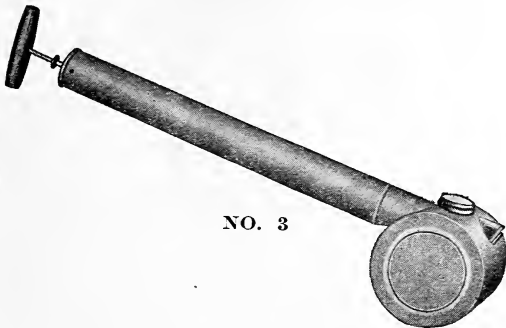
Carrying Strap: Adjustable with snap ends.

Automatic Nozzle: Brass for three different sprays.



No. 22  
Banner,  
Either  
Brass  
or  
Galvanized.  
Price  
on  
Application.

## One Quart Sprayer



NO. 3

Pump Chamber: 18 inches by 1¾ inches.

Tank: 4½ inches by 4 inches.

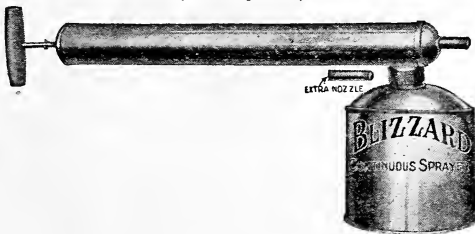
Capacity: One quart.

Double seamed tank, strong and durable. Made with large air chamber, cone-shaped end extends through the reservoir. An excellent sprayer for spraying potatoes, garden vegetables, disinfectants, fly oil, etc. A good, strong, well-made sprayer.

Price, 40 cents each.

## Blizzard Continuous Sprayer

(One Quart)



The trouble is left out.

A real high grade continuous sprayer.

Made in galvanized iron.

Pump Chamber: 15 inches by 1½ inches.

Tank: 4½ inches by 4 inches.

Capacity: 1 quart.

Double seamed tank, strong and durable. All brass working parts. Two brass nozzles, one for forward spraying, one for spraying at an angle. Detachable tank with large brass opening for filling. Discharge tube easily cleaned. For all spraying purposes.

Price, \$1.00 each.

## Justrite Compressed Air Sprayer

The construction of the Justrite is the same as the Banner shown above. Tank is double seamed to stand heavy pressure. Handle locks in brass pump head. Automatic self-closing nozzle produces a broad, long distance, fine mist or coarse spray.

The size of the Justrite makes it very useful for spraying around the garden, flower beds and shrubbery, also for spraying disinfectants in poultry houses, etc.



Tank: Heavy galvanized iron, 17 inches by 6¼ inches.

Capacity: Two gallons.

Pump: Seamless brass, 1¾ inches in diameter.

Pump Head: Brass, will not rust.

Hose: 2 feet, best grade.

Carrying Strap: Broad and heavy.

Automatic Nozzle: Brass for three different sprays.

Price on application.



## Auto Spray No. 5

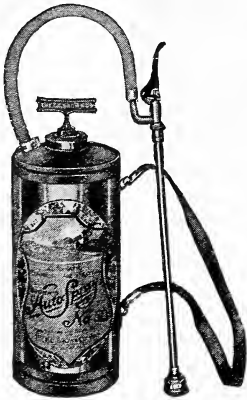
*It's Double Acting*



*The Same Spray With Half The Labor*

An ideal all-purpose hand sprayer made entirely of brass. It is double acting, producing a continuous spray, and will generate a pressure of 200 lbs. Can be supplied with galvanized steel Knapsack tank or may be used in connection with a bucket. Equipment includes 4 nozzles of special design for variety spraying.

USES—For the spraying of trees, shrubs, vines, field crops, for handling whitewash and disinfectants, washing automobiles, windows, fire fighting and other purposes.



## Auto Spray No. 50

This sturdy little machine is almost identical to Auto-Spray No. 9 in construction and manipulation, but with smaller capacity, holding about two and one-half gallons. It is particularly recommended for use where weight is a factor, as when the women-folk or youngsters help out with the spraying.

Construction same as No. 9. Equipment and uses same as No. 9.

## Auto Spray No. 26

*It Sprays Continuously*



A continuous atomizer of unusual merits. The container can be detached for refilling and cleaned by simply unscrewing from the pump cylinder. The syphon tube is easily removed and quickly cleaned by removing the nozzle.

USES—For spraying garden crops, for use in greenhouses, for handling disinfectants and fly oils. It can be used with all spraying solutions.

## Auto Spray No. 9

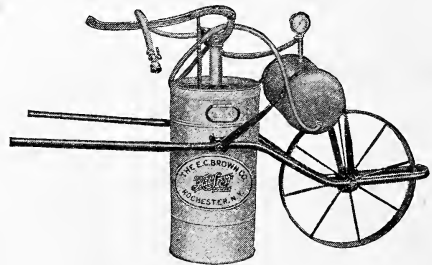
COMPRESSED AIR SPRAYER



Sturdy compressed air sprayer, equipped with a heavy brass screw cap to lock pump in reservoir. The metal in the tank is lock-seamed, well riveted, soldered inside and out. May be obtained with brass or galvanized tank. Brass tank is strongly recommended as it will withstand strong solutions. Capacity  $3\frac{1}{2}$  gallons.

USES—For spraying field crops, shrubs, vines, poultry houses, for removing wall paper, disinfecting, whitewashing, creosoting shingles, applying floor oils and for general purposes.

## Auto Spray No. 3-F



Wheelbarrow sprayer of simple construction. Made in 12-gallon galvanized. The air chamber makes it possible to get up sufficient pressure to spray about 5 minutes without repumping.

USES—A general purpose spray pump that can be used for almost any purpose on the farm. It is an excellent whitewash sprayer for barns, chicken coops, factories, etc.

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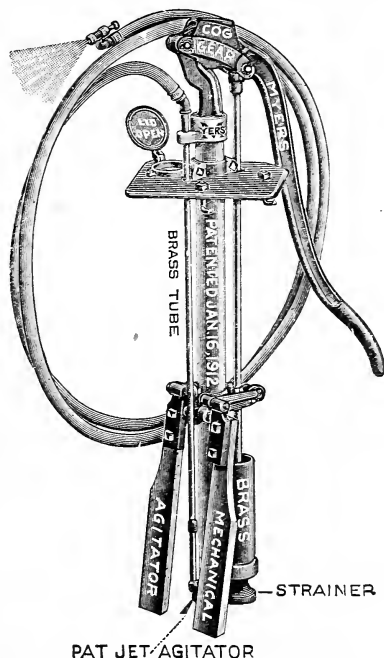
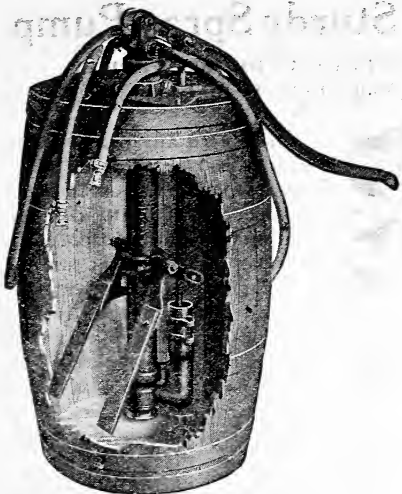
## Gould's "Pomona" Barrel Pump

NO. 1100

Outside Packed Plungers. No Leather Packings.

It is unusually powerful, fully capable of supplying two leads of hose, 15 feet each, and two angle nozzles. The working parts, including the plunger, plunger connection, gland, valve, valve seats and strainer, are of solid bronze. They are simple, accessible and easily removed. It is equipped with a long adjustable lever, producing long or short strokes by simply removing and replacing a single bolt, thus varying the pump's capacity. The agitator is simple, but very effective, operated by the same lever that works the sprayer.

Price on application.



## Myers Spray Pumps

**No. R318B.** A spray pump of a construction that is the very best in all its parts, being self-contained and ready for operation, when bolted to the barrel. Has bronze ball valves and brass seats; the plunger, cylinder and discharge pipe are all brass.

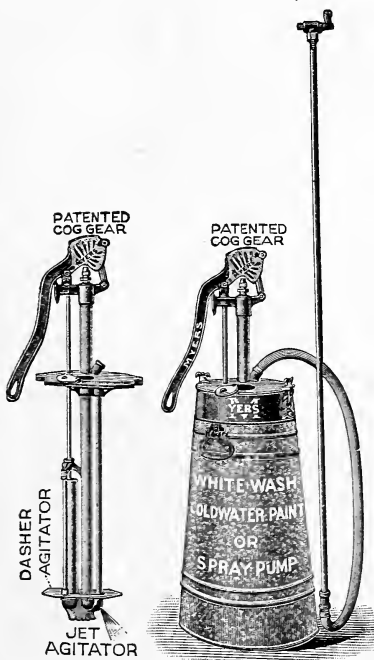
**No. 329.** Whitewash, Cold Water, Painting Machine and General Purpose Sprayer, with patent double agitator, a most complete and serviceable outfit. The tank is made of heavy galvanized iron, with a wide bottom, so as to set steady in operation. The cover is removable, is held securely in place by two end bolts with thumb nut, one on each side, which hold the

cover tight and prevent any spilling or splashing of the liquid. Holds seven gallons and is fitted with Bordeaux nozzle, brass ball valves, and has both jet and dasher agitator.

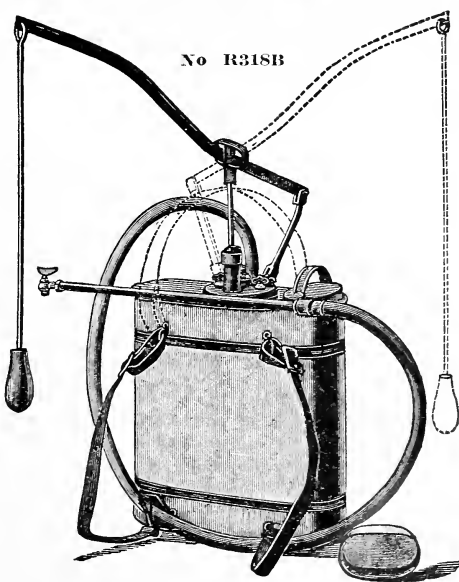
**No. 330.** Myers Knapsack Spray Pump, made with galvanized iron tank, and fitted with five feet of  $\frac{1}{2}$ -inch hose, pipe extension and Bordeaux or graduating Vermorel spray nozzle, which can be graduated from a fine mist spray to a solid stream, or shut off entirely.

**No. 331.** Same as No. 330, except made with heavy copper tank.

Price on application.



No. 329



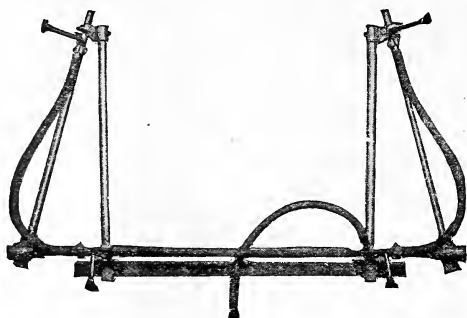
Myers Knapsack Spray Pump

## Spray Boom

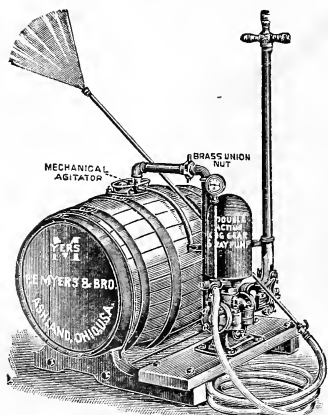
### FOUR-ROW

This boom is adjustable both horizontally and perpendicularly. By moving the spray boom proper on the uprights, you can raise or lower the nozzles as required. Then by moving the clips on the horizontal bar the nozzles can be so placed to spray rows of a number of different widths.

This boom is made so that the ends can be swung up, as shown in the cut, so that sprayer can be drawn on the road or through a gate without danger of the boom being broken off by any obstruction.



## The Myers Double Acting Cog Gear, Complete Spray Pump Outfit, No. R316B



### MOUNTED ON SKIDS WITH 50 GALLON BARREL AND MECHANICAL AGITATOR

With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger.

Special features: Cog gear movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for eight nozzles; well adapted for spraying potatoes.

Pump complete, 50 gallon barrel mounted on skids, with pressure gauge, one 15-foot lead, 1/2-inch, 5-ply discharge hose, one Fembro nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator.

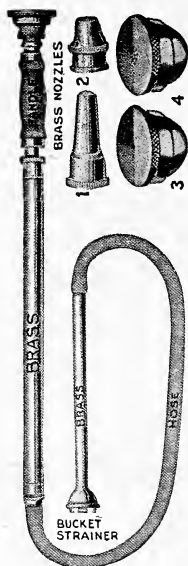
Price on application.

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## No. 45 Sturdy Spray Pump

### CONTINUOUS UNBROKEN SPRAY

#### Made Entirely of Brass



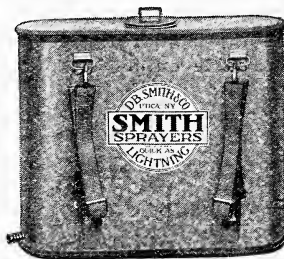
Used with any pail, bucket, can, barrel or tank by placing bucket strainer in such vessel. Works with ease on the up and down stroke, producing a continuous, unbroken spray. One brass tube works inside of the other, has brass ball valves, which will not corrode or rust. It does not require extension rods for elevating the spray, for it will spray the tallest tree from the ground.

Brass: Everything but hose and handle.

Nozzles: Four furnished for all spraying purposes.

Hose: 3 feet best grade.

Length: Brass barrel 24 in. Brass bucket strainer 16 in.



Where there is any field work to be done and the sprayer has to be moved constantly about, we advise purchasing with this pump a knapsack tank as shown.

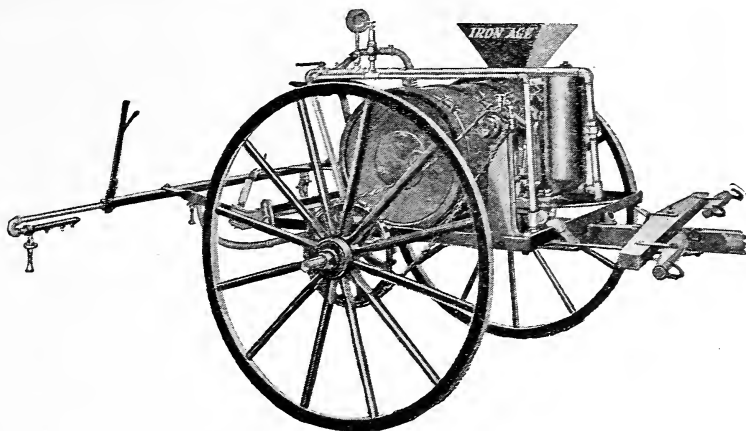
## Iron Age Four-Row Sprayer

EQUIPPED WITH THILLS FOR ONE HORSE. 55 GALLON TANK DUPLEX PUMP.  
TWO HORSE WITH POLE. 100 GALLON TANK TRIPLEX PUMP.

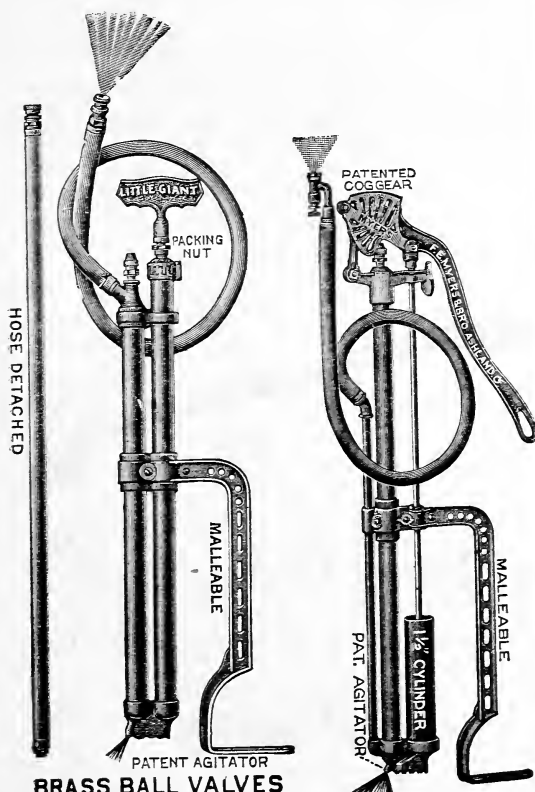
The "Iron Age" Duplex (double acting) Pump used on this No. 354-S Sprayer is new. Designed to give double the capacity of the single-action pump. It also gives smoother action, thus you can get higher pressure under the same conditions. This surplus power saves expense in the long run, quickly offsetting the slightly higher first cost. Its greater power is particularly important when the vines become very dense and heavy mixtures are used to prevent blight. This advantage will be readily appreciated by practical farmers.

This fast-working, long-lived machine will deliver spray at a pressure of 150 pounds or more. Width of rows is adjustable to 28, 30, 33 or 36 inches.

Price on application.



## Myers Spray Pumps



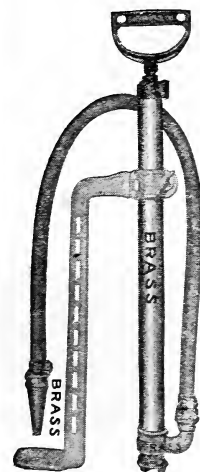
BRASS BALL VALVES

No. 327½

No. 324

## No. 27 Plumbers Force and Suction Pump

For Cleaning Clogged Water and Drain Pipes, and for Pumping Water out of Boats, Launches, Cellars, etc.



Many times on the farm the supply pipe leading trough becomes clogged with leaves and obstacles and this pump will quickly clean such pipes. Also used for cleaning drain pipes from the sink, and for many other such purposes.

Construction—Made entirely of brass, with brass ball valve. The footrest and handle are unbreakable malleable iron.

No. 327½. Myers Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine and coarse spray and solid stream nozzle.

No. 324. Myers Cog Gear Brass Spray Pump, with agitator, complete with hose and graduating Vermorel fine and coarse spray and solid stream nozzle.

With Bordeaux nozzle for spraying whitewash, \$1.00 additional.

PRICE ON APPLICATION



## Orchard Duster American Beauty Dust Sprayer

The American Beauty Dust Sprayer is a one man machine. It is small in size and cost; big in action. It is easily operated, has a large, powerful bellows, and is capable of accomplishing an enormous amount of work. It is, in truth, a "Little Giant." Filled and brought into action in less than five minutes; always dependable, and always available at critical times; requires only that care which any man of common sense will give to every piece of machinery he owns.

## Niagara Hand Dust Machines

The Niagara Blower Gun is an improved type of hand duster which embodies many of the patented features of the larger motor operated models, including the approved brush and feed devices. Its mechanical construction is very simple and durable. This gun is designed for low growing crops, such as potatoes, strawberries, tomatoes, etc., and also is adapted for treating small trees in young home orchards, etc. The weight is about 12 pounds, and its capacity for dust material is about 8 pounds. A flexible metal hose section permits free direction of dust mixture.

We furnish a two-row attachment at small cost.

Price  
on  
application.



NIAGARA BLOWER DUST GUN

## The Myers Power Spray Gun

Length Over All, 26 Inches

Utilizes the entire capacity of the pump and does away with all bamboo extensions, nozzles, fittings and long lengths of hose.



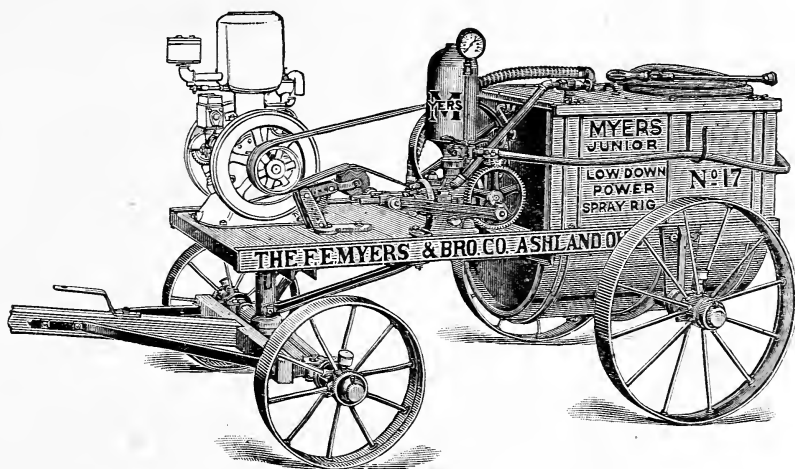
Price on application.

## The Myers Junior Low Down Power Spray Rig With All Steel Short Turn Truck

COMPLETE EXCEPT ENGINE

DOUBLE ACTING PUMP, BELT DRIVEN

46-inch Tread, 43 Inches High, 78 Inches Long.

Capacity:  $5\frac{1}{4}$  gallons at 50 R. P. M.;  $6\frac{1}{2}$  gallons at 60 R. P. M.

Specially designed for the farmer with small orchard who raises fruit for his own use, or what is generally known as Farmers' Spray Rings or Community Spraying, where several farmers combine to do their own spraying or hire one of their number to spray for all.

Pump—Double acting, back geared 5 to 1.

Plunger—Brass, telescope pattern; hemp packed.

Piston—Solid brass, with heavy brass stuffing nut.

Pulley— $14 \times 2\frac{1}{2}$  inch, crown face.Cylinder— $2 \times 4$  inch, removable brass shell.

Valves and Seats—Brass beveled and ground in.

Gear and Pinion—Machine cut.

## The Myers Junior Power Spray Outfit

FITTED WITH 2-INCH HORIZONTAL DOUBLE ACTING FORCE PUMP  
COMPLETE EXCEPT ENGINE. BELT DRIVEN

Tank—Cypress, 100 gallons, fitted with semi-rotary agitator swung from top of tank and connected direct to face-plate on the pump.

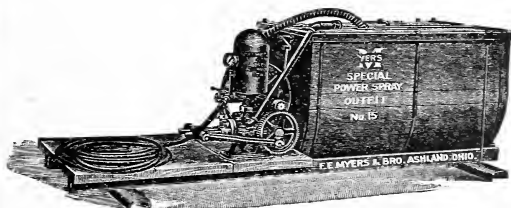
Frame—3-inch channel steel.

Deck—(On which engine and pump are mounted), plank,  $30 \times 47$  inches.

Pump—No. 580 double acting, back geared 5 to 1.

Capacity— $5\frac{1}{4}$  gallons per minute at 50 revolutions,  $6\frac{1}{2}$  gallons at 60 revolutions.Cylinder— $2 \times 4$  inch, removable brass shell.

Plunger—Brass, telescope pattern; hemp packed; handles hot or cold mixture.



Valves and Seats—Brass beveled and ground in.

Piston—9-16 inch solid brass, with heavy brass stuffing nut and brass follower.

Gear and Pinion— $1\frac{1}{4}$ -inch face, machine cut.Pulley— $14 \times 2\frac{1}{2}$  inch, crown face.

Price on application.



## Gould's "Pyramid" Double-Acting Piston Power Pump

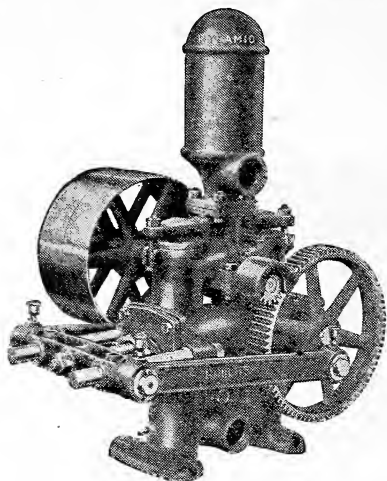


Fig. 1531

For capacities of 6 to 114 gallons per minute and heads up to 175 feet or pressures up to 75 pounds.

Built better than the rest to stand up to the exacting duty of farm and factory pumping. Gears machine cut from the solid. Brass lined cylinder. Rubber disc valves on bronze grids seats.

Size	Capacity Gallons Per minute	Connection Inches	Pulleys
2½ x 4	6	1¼	8 x 2½
3 x 5	12	1½	15 x 2½
4 x 5	21	2	15 x 3

Also larger sizes.

## Deming Close Top Pitcher Spout Pump

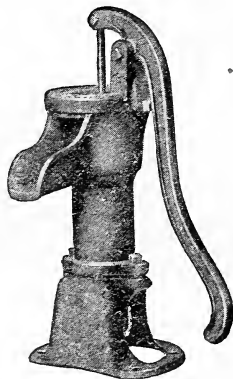


Fig. 125

ADJUSTABLE LEVER AND CUT-OFF BASE  
FOR A  
VERTICAL SUCTION LIFT OF 25 FEET

## Brass Jacket Drive Well Point

This well point is made of galvanized iron pipe with elliptical holes punched of uniform size an equal distance apart. It contains the greatest number of holes possible to punch in a pipe and retain sufficient strength for driving.



No. 661

PRICE ON APPLICATION

## Deming Cistern Pump

A Little Pump with a Big Punch

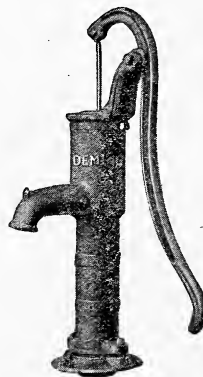


Fig. 120

LOW PRICED  
HIGH GRADE  
GOOD LOOKING

# The Myers Self-Oiling Electric Pump and Home Water System

**Motor Driven, Automatically Controlled, Economical, Efficient**

MADE IN TWO SIZES: { 200 Gallons Per Hour  
300 Gallons Per Hour

A pump is purchased for the purpose of delivering water under specified conditions. In other words, the purchaser of a pump is really buying water. The amount of water delivered in a given time, or term of years, depends upon the pump, its quality, workmanship and ability to take care of itself, and not to require undue attention. In the Myers Self-Oiling Electric Pump we have provided the following special features that are vitally necessary in a modern power pump.

## SPECIAL FEATURES

Carefully and accurately machined parts; perfect and continuous lubrication; extra large or oversize valves so located that each one can be removed without disturbing any other valve or any other part of the pump or pipe. The suction valves are placed at an angle instead of vertically. This avoids all right or acute angle turns in the passage of the water through the pump from suction to discharge—direct water ways. All parts fully enclosed, excluding dust and dirt, insuring long life and service. The pulley shaft extends through the pump with two self-cleaning, removable bearings—one located on each side of the pitman connection, which allows the used oil to pass around the end of the shaft and bearing, washing out all sediment before returning to the oil pump. A  $3\frac{1}{8}$ -inch pitman connection running in oil, which is five times the size of connection used on any other make of pump, as they use a  $\frac{1}{2}$  or  $\frac{5}{8}$ -inch crank pin.

Individual air chambers over discharge valves thoroughly cushion the stream and prevent pounding—noiseless.

Suction and discharge pipe taken from the body of the pump—not off the cap over the discharge valves, which require the taking down of the discharge line to examine any valve, as is used in practically all other pumps.

The pump is fitted throughout with solid brass pitman, crosshead, piston rod, plunger castings, valve seats and valve posts, seamless brass cylinder, and quick closing special rubber self-priming valves, all brass dependable air intake valve that will not rust or corrode, malleable iron belt tightener with specially treated wood pulley with compression grease cup; has self-pinning vacuum chamber on suction line to assist the even flow of water to the pump.

Best quality endless belt,  $1\frac{1}{4}$  inches in width, prevents slipping when starting under load.

Tank: Galvanized iron only, electric welded; size, 16 x 48 inches, 42 gallons capacity, mounted on iron bed plate, carrying both pump and tank.

These special features of the Myers pump, in connection with the highest class motor, guarantee to the purchaser the maximum in value.

## EQUIPMENT

Motor: We use only motors of the repulsion and induction type, with extra high starting torque, the highest class and quality made in the United States, because we believe in furnishing a motor that compares with the pump, as we find it much better to use these high class motors than to keep up a service department, as that causes everybody trouble.

An automatic pressure controller is supplied with pneumatic tank outfits, by means of which the tank pressure is controlled automatically. Controllers are regularly set for a minimum pressure of 20 pounds and a maximum of 40 pounds, and can be adjusted to 30-50 pounds pressure if desired to reach the top floors of a high building.

The 300-gallon pump will supply a  $\frac{3}{4}$ -inch Gem nozzle wide open at 35 pounds for sprinkling purposes.

### Capacity 200 Gallons Per Hour

**No. 606AT.** Myers Self-Oiling Home Water System, with vacuum chamber, relief valve, air valve, pressure controller, endless belt and 1-6 H. P., 110 volt, 60 cycle, single phase A. C. or 32, 110 or 220 volt D. C. motor, with 42-gallon galvanized tank, base, water gauge, pressure gauge and connecting fittings. Suction and discharge,  $\frac{3}{4}$  inch.

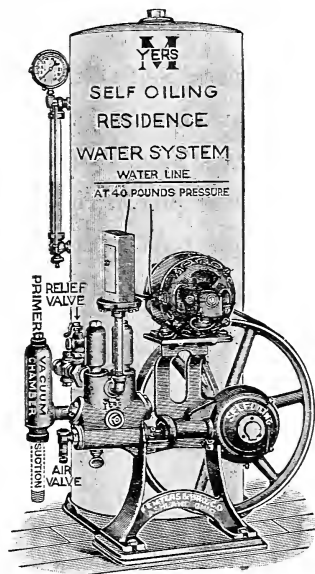
### Capacity 300 Gallons Per Hour

**No. 609AT.** Myers Self-Oiling Home Water System, with vacuum chamber, relief valve, air valve, pressure controller, endless belt and  $\frac{1}{4}$  H. P., 110 volt, 60 cycle, single phase A. C. motor, with 42-gallon galvanized tank, base, water gauge, pressure gauge and connecting fittings. Suction 1 inch, discharge  $\frac{3}{4}$  inch.

If frequency and voltage are other than specified above on motors, there will be an extra charge. Specify current used. If A. C., give phase, frequency and voltage. If D. C., give voltage.

The No. 608AT will supply a  $\frac{3}{4}$ -inch Gem nozzle wide open at 35 pounds for sprinkling.

## PRICE ON APPLICATION



## Myers Self-Oiling Bulldozer Power Pump

Fully Inclosed Back Geared Five to One Renewable Bearings. One Hundred Pounds Pressure or Two Hundred and Thirty Feet Elevation.

Maximum Capacity 500 Gallons Per Hour at 70 R.  
P. M. of Piston—Usual Speed 60 to 65 R. P. M.

Myers Self-Oiling Bulldozer Power Pump with vacuum chamber,  $2\frac{1}{2} \times 3$  inches.

Brass lined cylinder,  $12 \times 2$  inches.

Brass piston rod,  $\frac{1}{2}$  inch.

Tight and loose pulleys.

Suction and discharge,  $1\frac{1}{4}$  inches.

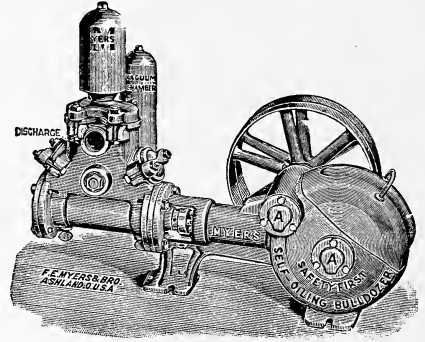


Fig. 612

## Myers Cog Gear Double and Single Acting Force and Lift Pumps



Fig. R72

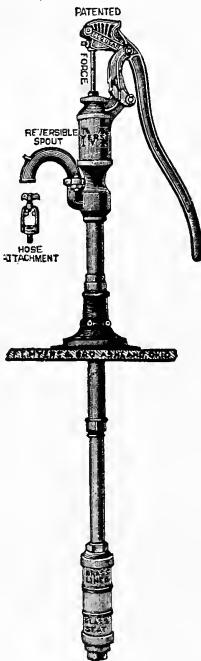


Fig. R1072



Fig. R1052

**Fig. R72.** A double acting, anti-freezing force pump for shallow or deep wells. Has a 3-inch brass lined lower cylinder, with glass valve seat. The brass upper cylinder is  $4\frac{1}{2}$  feet below the platform, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

**Fig. R1072.** A single acting, anti-freezing force pump. Has adjustable base and reversible spout; 3-inch brass cylinder with glass valve seat, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

**Fig. R1052.** Lift pump, anti-freezing. Has adjustable base and reversible spout; 3-inch brass lined cylinder with glass valve seat, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

Price on application.

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Myers House Pumps

### Myers Long Stroke Cog Gear Pitcher Pump



Fig. R416

This pump is built to fill the requirements of a pitcher pump with extra large capacity. It is fitted with rolling motion cog gear handle, adjustable to any desired angle. The cylinder is bored and highly polished. Arranged to drop the water to prevent freezing. Tapped for  $1\frac{1}{4}$ -inch pipe.

### Myers Long Stroke Cog Gear Brass Cylinder Pitcher Pump

PATENTED

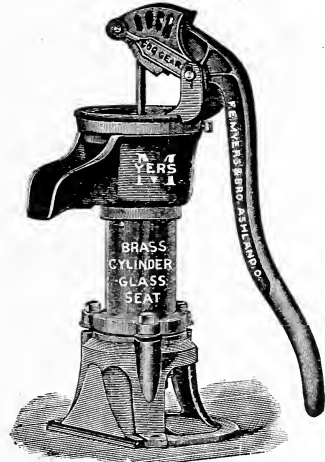


Fig. R220

Built in strictly first-class manner, with seamless drawn brass cylinder, rubber fibre check and revolving top. Tapped for  $1\frac{1}{4}$ -inch pipe.

### Myers Long Stroke Cog Gear Double Acting House Force Pump

PATENTED

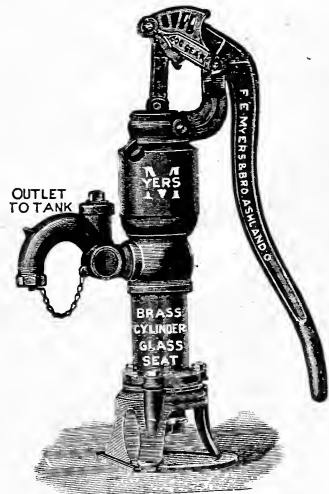


Fig. R251

This pump is double acting, has heavy seamless brass upper and lower cylinders, with patented glass valve seat, fibre rubber check valve and expansion plunger bucket. A powerful pump for forcing water to an elevation or into a tank. Tapped for  $1\frac{1}{4}$ -inch pipe.

### Myers Cog Gear House Lift Pump

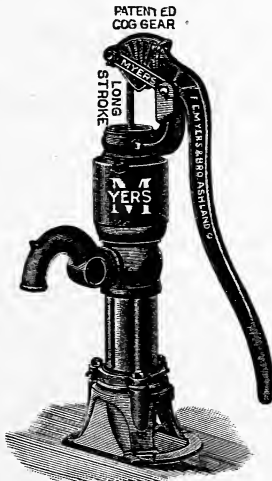


Fig. R245

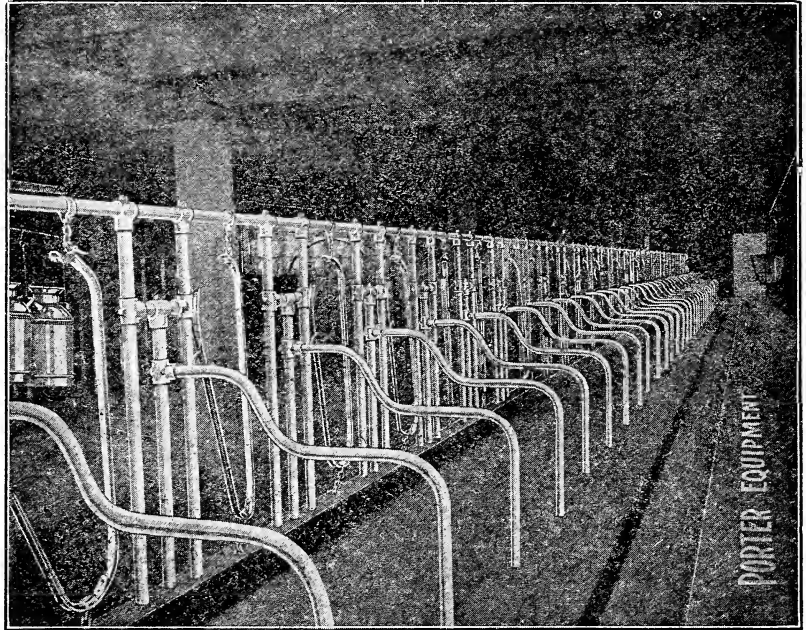
This pump has siphon spout. Also fitted with 3-inch brass cylinder, glass valve seat and patent drop valve. Tapped for  $1\frac{1}{4}$ -inch pipe.

PRICES ON APPLICATION

## Porter Barn Equipment

**The Cleanliness, Convenience and Comfort of Porter Equipment  
Will Swell Your Dairy Dividends.**

The better care you give your cows, the better they will pay you. Stable them in light, clean, comfortable, sanitary quarters, and they'll require less feed, keep freer from disease, produce more milk, with a higher percentage of butter fat, and your milk and butter will bring top-notch prices. These are facts proved over and over again in the experience of successful dairymen who are using Porter Stalls and Stanchions. Porter Equipment in your barn will mean a big boost for extra profits, for it's built with practical, common-sense understanding of the care the dairy cow needs for best results. It keeps the stalls clean, prevents waste of feed and manure.

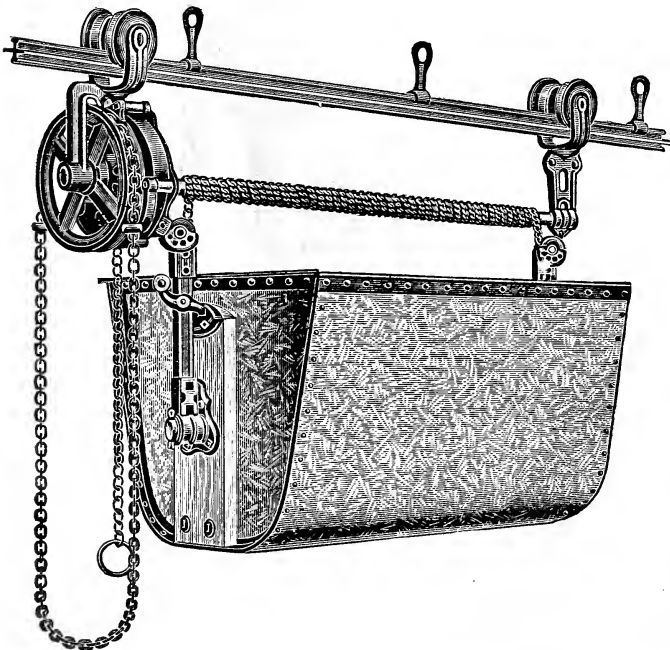


**Expert Advice on Barn Plans and Equipment Free for the Asking**

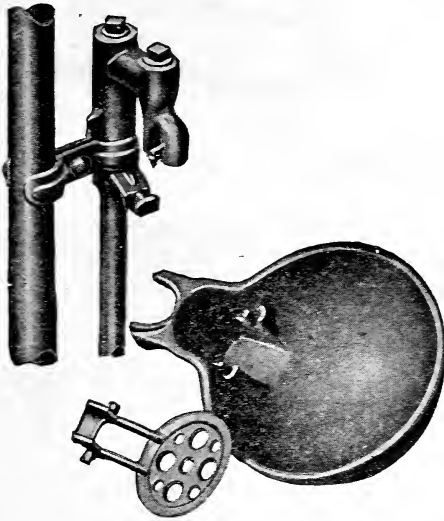
## Porter Litter Carrier

With it one man can do the work of three, and do it better and easier. It is the handiest and most satisfactory litter carrier on the market. The chain hoist gives the biggest lift for the power and the quickest action. The hopper is made of heavy galvanized steel with capacity of 10 bushels; is held automatically at any height, and is provided with a dumping device, which is tipped at will by the man in the stable. Has one-piece steel track, carrier wheels are roller bearing, and are swiveled so carrier will go around the sharpest curves safely. No end motion, no jogging, liquid litter will not slop over—the only litter carrier with a stationary arm.

**Price on application.**



## Porter Automatic Drinking Bowl

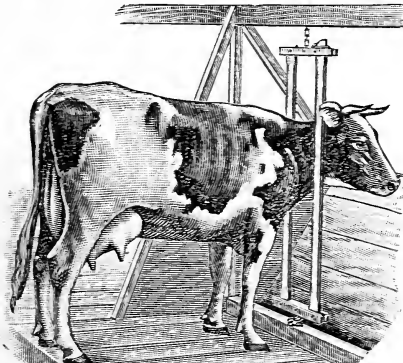


Cannot overflow because automatic valve in controlled entirely by the pressure plate. Valve seat, stem and spring made of highest grade brass. Bowl, 8½ inches deep, 4½ inches diameter, constructed to fit ¾-inch pipe. Can be attached to 1-inch or 1¼-inch steel tubing supports.

## Robertson's Patent Chain Hanging Stanchion

Practical, Safe and Durable, and Afford  
Comfort to the Animal

Made with Adjustable Neck Space



A pleased customer is the best possible endorsement that an article can have. These stanchions are in use by thousands of the most successful dairymen and farmers all over the country, who have had practical experience and know that these stanchions are not an experiment.

PRICE ON APPLICATION

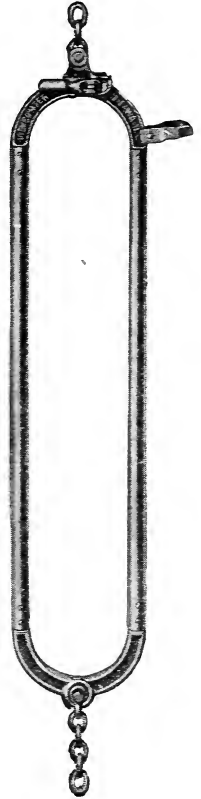
## Porter Cow Stanchions

Fig. 15

The new Duplex-Latch Cow Proof Stanchion is made from high-grade carbon tubular steel tubing, 1 15-16 inches diameter.

Fig. 14

Porter Sanitary Wood Lined Stanchion U-Bar is made of high carbon steel, latch opens easily and when locked is cow-proof.



## Stanchion Basin

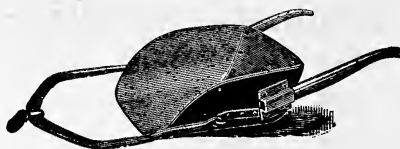


An examination of this cut shows its advantages; can be emptied and cleaned in 3 minutes, without fouling supply pipe; is easily kept anti-septic, and can be quickly connected, being screwed on the upright pipe inside of basin.



## Steel Road Scrapers

Made of heavy steel plates, cut from a single sheet pressed cold, lapped and riveted at the corners, giving greatest strength where needed. Special steel is used in the bail, and they are hung so as to handle easily. Heavy shoes or runners are used to stiffen the bottom.



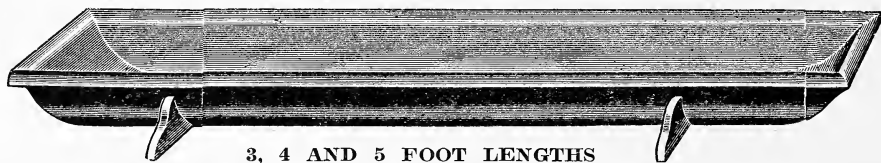
## Steel Head for Drag



This illustration shows a simple device whereby a drag can be readily made by using STRAIGHT plank. We also furnish the drag complete, as shown above.

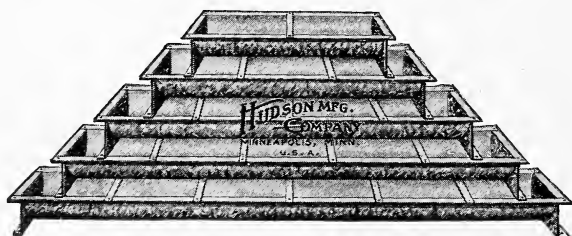
PRICE ON APPLICATION

## Cast Iron Hog Troughs



3, 4 AND 5 FOOT LENGTHS

## Heavy Galvanized Hog Troughs



3, 4 AND 5 FOOT LENGTHS

## Hudson Barrel Cart

This is the simplest, strongest and handiest grapple care made. It will handle any size barrel without adjustment. To pick up a barrel, push the cart against it and raise the handles. The hoop then drops into place over the top and the bail can easily be slid into place underneath, making a substantial arrangement. Lowering the handles raises the barrel from the ground and brings it into the proper position for wheeling. Nothing is more simple or as positive in action. The wheels are 36 inches in diameter, rigidly braced with 24 spokes, and with heavy, half-oval, 1½-inch steel rims. Axle is of selected 1-inch steel, curved to fit the barrel.

Price on application.



Picking up a Barrel

## Wheelbarrow Grass Seeder

This is really the greatest grass seeder made to-day. Not a toy, but a strong and durable implement specially designed and adapted to its use. It's easy—it weighs only 45 pounds. Does not throw the seed into the wind. Puts it on the ground lightly and evenly where it belongs, insuring the operator a good, even catch. Strong and durable. We know of Hudson Seeders which have been in use 30 years which are thoroughly good and effective today.

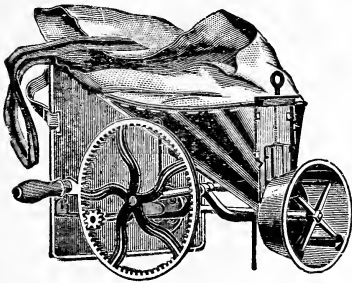
**"NEVER MIND THE WIND—  
SOW ANY TIME"**

**Price on Application**



### WHEELBARROW SEEDERS

are a most valuable implement for sowing all grass seeds broadcast. The quantity of seeds sown per acre is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. For all sections where winds prevail, there is no machine made that will equal this implement for an even, accurate job of seeding. The quantity required per acre can be instantly changed by slipping a pin from one hole to another. These seeders run light and are not complicated. Seeds can be sown mixed or separate and in any quantity desired.



## The Cahoon Broadcast Seed Sower

**For Sowing Rye, Wheat, Oats, Barley, Buckwheat,  
Grass Seed, Etc.**

This hand machine sows from four to eight acres per hour, at a common walking gait.

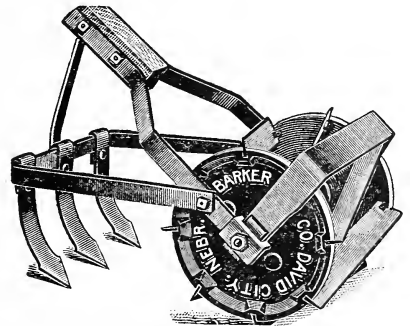
## Barker Weeder, Mulcher and Cultivator

Judge the Barker Weeder, Mulcher and Cultivator on its merits, not on our say so.

Place a Barker in your garden, push it clear across the garden at a comfortable walk and you will have killed the weeds and formed a level, porous soil mulch over a strip six inches to twelve inches wide—depending upon the size machine you use. You get the weeds just under the surface as well as those showing on top—you don't miss any, you get 'em all.

How long would it take you to do this grade of thorough cultivation with a hoe?

The Barker destroys the weeds and forms a perfect soil mulch in one operation.



**PRICE ON APPLICATION**



# Planet Jr

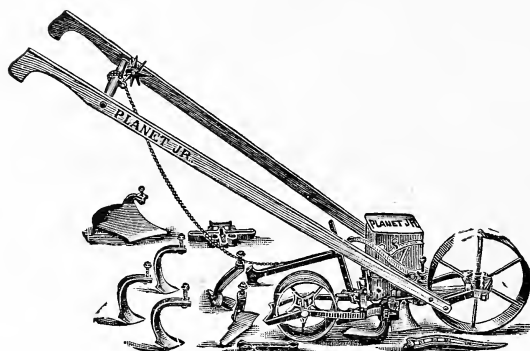


## Farm and Garden Tools

### HAND SEEDERS

Planet Jr. Seed Sowers were first made in 1871. They were then, as now, the best in design, quality and usefulness. Since then they have been adopted and recommended by leading seedmen and seed growers. Their use has spread all over the world among market gardeners, general farmers, sugar beet and onion growers.

**No. 4 Planet Jr. Combined Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow.** There are doubtless more of them in use in the world than any other seeder made. This combined tool will quickly pay for itself in seed, labor saved and increased crops. It combines in one machine an accurate hill dropping seeder, a continuous row seeder, a useful single wheel hoe and an effective single wheel hoe and cultivator, an excellent furrower, and a rapid and efficient wheel garden plow. It is accurate, simple, durable, reliable and easy running.

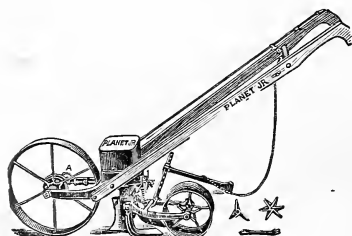


No. 4

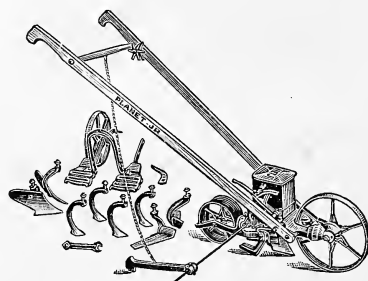
**No. 4-D Seeder.** Same as the No. 4, except comes as a seeder only, without the cultivating attachments. The feed of the seeder is adjusted accurately by a brass set screw and cut-off sliding on the outside of the cylinder, and connected to a lever and index at the right-hand side of the hopper. The index contains the names of the principal seeds and indicates separately the proper adjustment of the seeder for sowing in hills and drills.

**No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single Wheel Hoe.** The No. 25 combined seeder, double and single wheel hoe is valuable for gardeners who have enough acreage for a double wheel hoe to be used, and yet prefer not to buy seeders and wheel hoes separately. The hopper holds four pounds of onion seed. As a seeder, it is practically the same as the No. 4 Planet Jr. described above.

**No. 3 Planet Jr. Hill and Drill Seeder.** The No. 3 Planet Jr. Seeder is a popular size for market gardeners, at a moderate price. The special force feed is an admirable feature, working equally well whether sowing with an ounce or a full hopper. The hill dropping attachment is simple and reliable, spacing hills either 4, 6, 8, 12 or 24 inches apart. Changes of distance between hills may be made in less than a minute by changing spacing wheels from hill to drill.



No. 3



No. 25

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



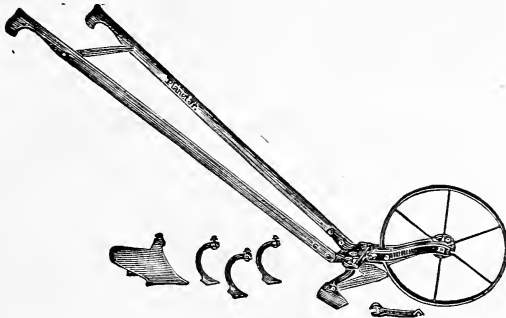
# Planet Jr



## Farm and Garden Tools

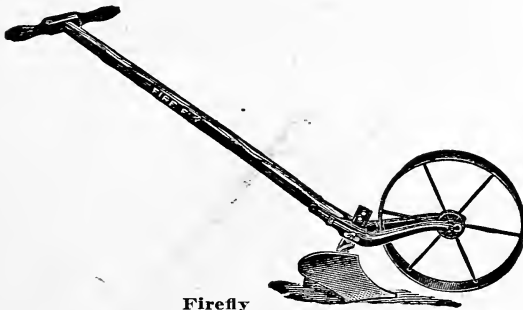
No. 5 Planet Jr. Hill and Drill Seeder is recommended for those who desire a larger seeder of this type. Its capacity is five quarts of seed.

No. 35 Planet Jr. Seeder Attachment for Wheel, Hoe and Garden Plows.



No. 17

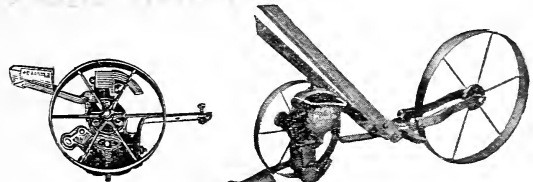
No. 119 Planet Jr. Garden Plow and Cultivator. For those who prefer a high wheel hoe for their garden work. The No. 119 garden plow and cultivator has been welcomed by thousands who wanted a high wheel hoe and is giving many years of service and absolute satisfaction. With it you may do the necessary plowing and cultivating, making furrows for seed, covering seed and hilling. The scuffle blade is just the thing for weed cutting and shallow cultivation. Leaves a fine mulch, preventing rapid loss of moisture by evaporation.



Firefly

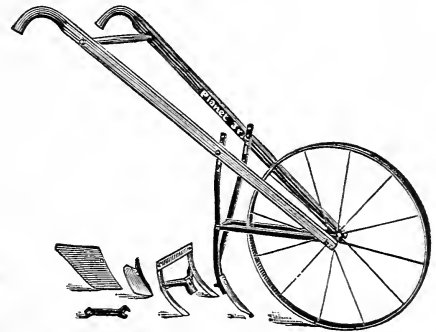
Planet Jr. Star Pulverizer, Leveller and Weeder. The star wheels break up the soil and the scuffle blade cuts the weeds close to the surface and mulches the soil. Very effective in weeding, in leveling and pulverizing the soil for seed beds, and particularly effective in breaking up the soil after a rain, without producing a lot of lumps.

Price on Application



No. 35

No. 17 Planet Jr. Single Wheel Hoe. The equipment of the No. 17 single wheel hoe consists of one pair of 6-inch hoes, three steel cultivator teeth and one large garden plow. These three sets of equipment are all the finest of their kind, and make an outfit sufficient for most garden work. You can do more and better work in one day than you can do in several days with the old-fashioned hand hoe. With the hoes you work to or from the row. A change of wheel regulates the depth for working the hoes.



No. 119

Firefly Garden Plow is exceedingly useful to owners of small gardens. It will throw a furrow four to six inches wide, one to three inches deep, deeper by going a second time in each furrow. It opens furrows for manure or seeds and covers them, and opens up rows for all kinds of plant setting.



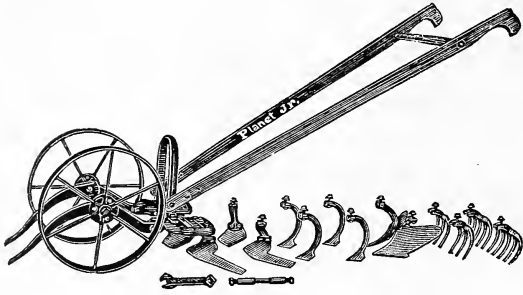
Pulverizers (7½-inch cut)



# Planet Jr

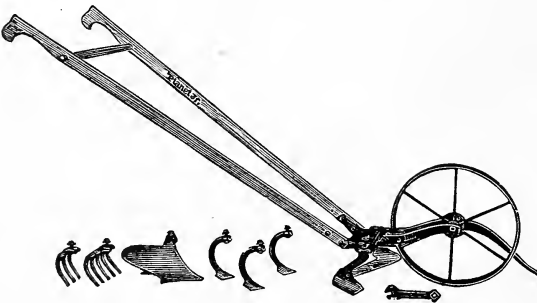


## Farm and Garden Tools



No. 11

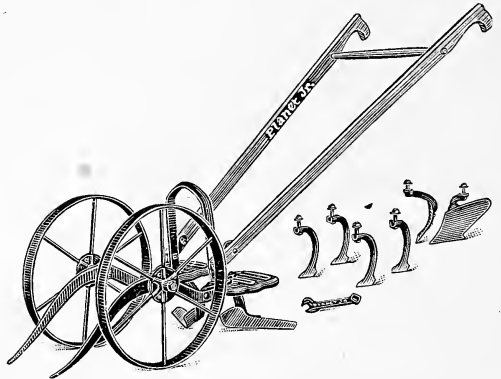
**No. 12 Planet Jr. Double and Single Wheel Hoe Combined.** The No. 12 is the most popular double wheel hoe in use today. Can be used by man, woman or boy. Its equipment consists of one pair of 6-inch hose, four steel cultivator teeth, one pair of plows, and two leaf lifters. This variety of equipment makes it possible for one to do practically all the cultivating work required in market, farm or home garden.



No. 16

**No. 19 Planet Jr. Garden Plow and Cultivator.** This is a very desirable implement, and is especially designed for the farmer's home garden work, although it offers to everyone, with either field or garden, a cheap and effective tool for wheel-hoe operations. The standard is slotted for depth regulation, and an adjustable piece carries any of the attachments that go with the machine. The cultivator tooth does deep work and marks out rows for onion sets, plants, etc. The sweep does excellent level shallow work, cutting out the weeds under the surface, and giving effective cultivation. The plow marks out furrows, covers them up, and plows to or from the crop, as wanted; opens furrows for fertilizer, peas, beans, etc. Use the five-prong attachment for both deep and shallow cultivation. It breaks up the ground and leaves a mulch that preserves the moisture in the soil. The variety, shape and quality of the tools make the No. 19 light running and effective. It is strong, well made, and quickly adjusted, the height of the handles being adjustable to suit man, woman, boy or girl.

**No. 11 Planet Jr. Double and Single Wheel Hoe Combined.** This is the most complete combined double and single wheel hoe we offer, and has the largest and most useful set of attachments. The steel frame can be set at different heights to suit any kind or depth of work, and the attachments or their position can be changed in a few seconds.



No. 12

**No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow.** Single wheel hoes are lighter than the double and do almost the same variety of work. They are used mostly between the rows, yet by mounting the wheel on the other side of the arm, Planet Jr. single wheel hoes can be used to hoe both sides at once while the plants are small—the most important time.



No. 19

Price on Application



# Planet Jr

## Farm and Garden Tools



**No. 26 Planet Jr. Drill Seeder.** "For all Soils." The No. 26 has many new features in a drill seeder that make it very valuable for large growers, particularly those who plant on muck or in sandy soils, and at the same time it will give A-1 service in all types of soil.

### IMPORTANT FEATURES

**Broad Tread Wheels:** Front and back. Make it easy running and prevent sinking in muck or sand.  
**New Seeding Device:** Sows practically all vegetable seeds at the right depth and thickness. Employs two seed openings, one for small and one, for large seed. A positive feed wheel with a "wave-motion" forces the seed evenly through the openings without cracking any seed.

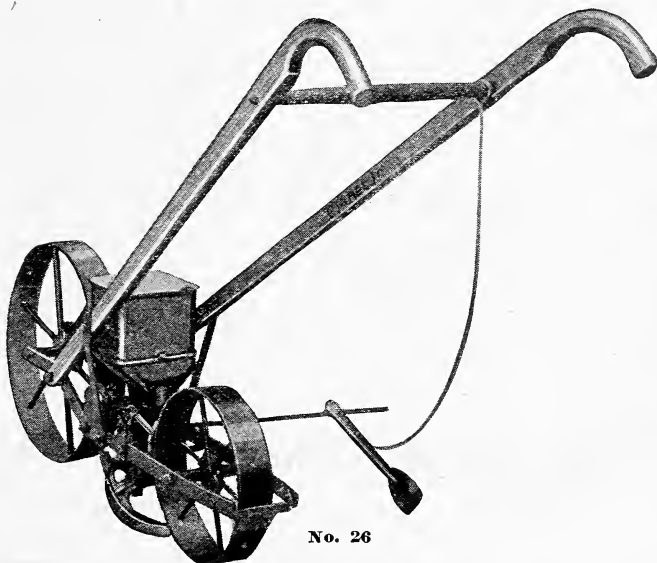
**Index and Cut-Off:** When once set, you know exactly how big the opening is. Each time you change, you know exactly how much the opening has been changed.

**Opening Plow and Coverers:** Latest design opening plow opens clean drill, narrow and sharp, and wings running from front to back prevent soil falling back in drill and stop wind from blowing seed away. Coverers are floating type, cover evenly, though ground may be very uneven.

**Hopper:** Detachable; holds 4 quarts. Can be removed to empty or to examine seed opening.

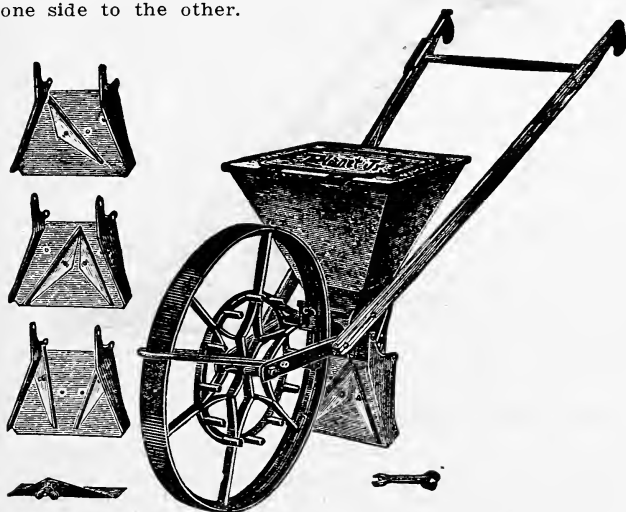
**Feed Shut-Off:** Attached to coverers. When drill is lifted by handles the weight of coverers closes seed opening; when let down, seed flow starts exactly as before. Automatic. no rod or other device to forget and then find you have gone over part of a row without seeding.

**Marker:** Double pointed marker iron makes a distinct mark in any soil. It is pivoted between handles, and easily and quickly moved from one side to the other.



No. 26

**No. 20D Planet Jr. Fertilizer Distributor.** Save Fertilizer and Get Bigger Crops—Earlier. Most authorities agree that it is better to put only part of the fertilizer in soil when seeding and to side dress with a quick-acting fertilizer after the crop is up. The No. 20D distributes 100 to 1,000 pounds of fertilizer to the acre. Controlled by an accurate index on handle. It will distribute both to left and right at one time, all down the center, or to either left or right. See arrangements of spout in illustration. It will distribute material in any reasonable condition without clogging. Agitator is operated by cogs on one side of drive wheel. Drive wheel is 20 inches in diameter with 2-inch face; runs easily. The hopper is galvanized; holds half a bushel. Sturdy, runs easily, and will save you time, labor and fertilizer. Pea and Bean Planter can be supplied to use with this tool. Sows peas and beans right. Gives you two tools in one. Order No. 20 Fertilizer Drill, Pea and Bean Planter Combined.

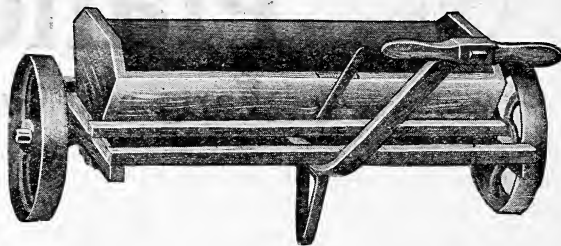


Price on Application

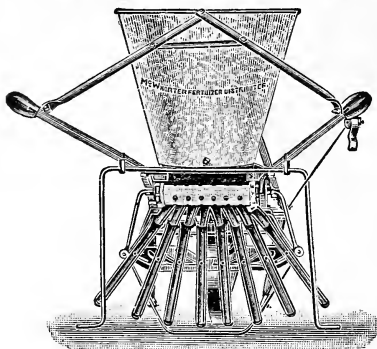


## Stevens Hand Fertilizer Sower

This hand sower, small, light, easily operated in close quarters, conveniently drawn by one man and well balanced, fills a need on the smaller place that no other fertilizer distributor can reach, particularly in top dressing lawns and gardens. It carries a wood hopper 34 inches long and with capacity of  $1\frac{1}{2}$  bushels. The weight without load is only 85 pounds. Great care has been exercised in the construction of this sower to provide for easy balance when loaded. One man easily handles it.



## McWhorter No. 21 Hand Fertilizer Distributor



This machine is particularly adapted to the needs of the market gardener for sowing either commercial fertilizer or lime. Fertilizer can be applied in any manner desired—in the furrow, beside the growing crop, as a top dressing, or broadcast to a width of 30 inches. The operator has perfect control of the quantity sown—from 200 pounds to over a ton per acre.

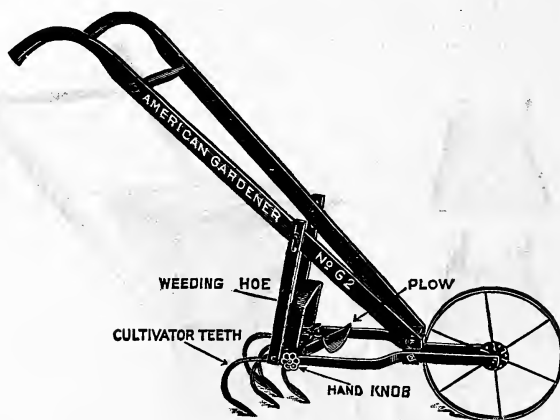
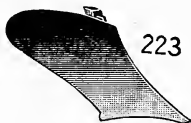
## True Temper Geneva, Quick Adjustable Cultivator

NO. G2

Is recognized everywhere as the only real quick-adjustable cultivator on the market. It has a weeding hoe, a plow and five cultivator teeth, all permanently attached to a revolving steel plate. Any of these tools may be securely locked into working position by a few turns of the hand wheel—a time and labor saver.

Machine has steel forged tools, well selected oak handles, with comfortable handle grips. It has 14-inch steel wheel and is finished in colors, then varnished.

Plow and furrow opener comes as extra attachment.



PRICE ON APPLICATION

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## The New Oliver Two-Way Sulky Plow

It is designed to meet the peculiar needs of hillside and irrigation farming. Back ridges which retard the flow of water in irrigated fields are avoided by the use of this new plow. It gives the full advantage of tractor power in irrigated fields and on hillsides where it is desirable to plow back and forth across the field using alternately a right and left hand bottom. Its work on hillsides is extremely efficient because it never drifts. This is prevented by running in the furrow, the wheel next to the bottom that is plowing. Thus a uniform depth and width furrow slice is assured at all times. Great strength fits this plow for working in stony land or under other adverse conditions.

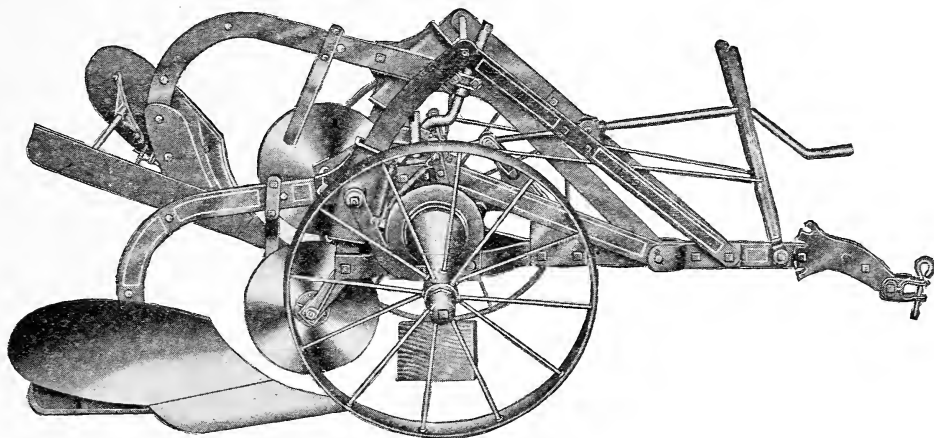
It is truly a one-man outfit, simple in construction and easily operated.

### Outfit Can Be Backed

The hitch on this new plow is fastened to the end of the extension on the beams, making it possible to back the outfit a reasonable distance. This is especially advantageous when turning on narrow headlands where it is necessary to back the plow to make short turns.

### Individual Power Lifts

There are two dependable and quick-acting power lifts—one for each bottom. These lifts operate only when raising the bottom. Their action is positive, raising the bottom in a short space of travel without the aid of lifting springs. Independent trip rods control each lift.



### Raise Both Bottoms at Once

The bottoms can be raised independently to the same height regardless of plowing depth, or both can be raised at the same time. When a bottom has reached full height the lift locks, holding it in raised position, allowing sufficient clearance for transporting. When the lift is tripped to lower either bottom that bottom quickly reaches full plowing depth while the other bottom remains raised.

### Easily Controlled From the Tractor Seat

All field adjustments on this New Oliver Plow can be made easily and quickly from the tractor seat with the outfit moving or standing still. Plowing depth of both bottoms is regulated by means of a powerful, ball bearing screw control. Unlike a lever, the screw is always in the same convenient position handy for the operator to reach. It is not even necessary for him to turn his head to locate or adjust this control.

Individual trip rods controlling the power lifts are as accessible as the depth adjusting screw. It requires only a slight pull on the trip rods to either raise or lower the bottom.

### Sturdy, Strong Construction

The rigid frame on this new implement embodies ample strength to give long life even under the most adverse conditions. The beams are made of flat bar, high carbon steel. They are reinforced by an extra piece riveted on at the bend and following the curvature of the beams to the second bolt of the standard.

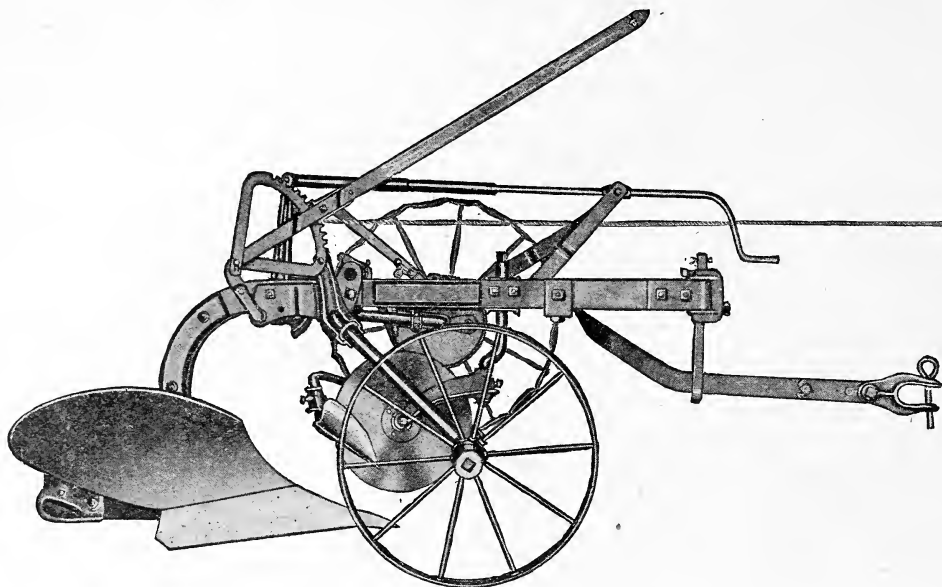
The heavy steel axle is  $1\frac{3}{8}$  inches in diameter. Heat-treating further strengthens the beams and axle, reducing to minimum the possibility of banding or breaking.

### Extra Long Bearings

The bearings in the wheels are extra long, assuring long life, light draft and straight running wheels. Positive lubrication is furnished through the using of the hub caps as compression grease cups. Bases to meet a wide variety of soil conditions can be had for use on this new plow.

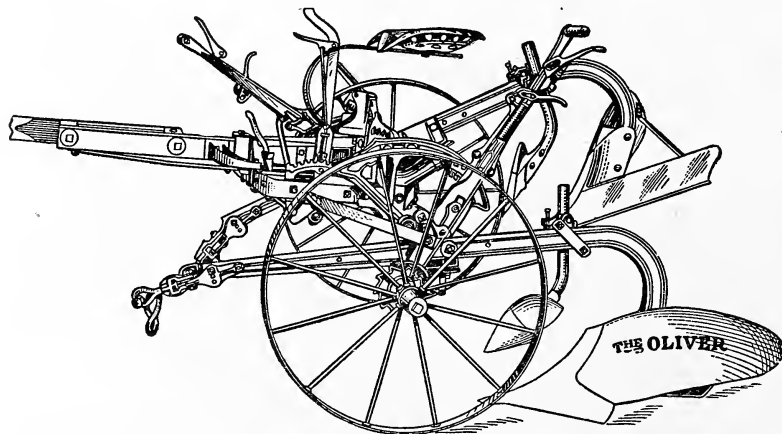
## Oliver No. 134-XX Tractor Sulky Plow

A PLOW FOR FORDSON TRACTOR, WITH 16-INCH BASE



The Oliver No. 134-XX Sulky finds favor among the farmers who practice deep plowing, or who do their plowing in soil that is very hard or weedy. The improved construction of this new Oliver Tractor Plow has made possible an extremely simple plow of great strength that is notable for its convenient operation and quality work. All field adjustments are easily made. The powerful action of the ball-bearing screw multiplies human effort and makes depth adjustment rapid and easy. The handy leveling lever is convenient to the tractor operator. The draw bar is fastened at the center of draft, and is adjustable up and down and sidewise, making possible just the correct line of draft and the right degree of penetration. The draw bar has the same wide range of adjustment, fitting this plow for use with any standard light tractor. The 3-ply, heat-treated beams are extra strong.

### REVERSIBLE SULKY PLOW

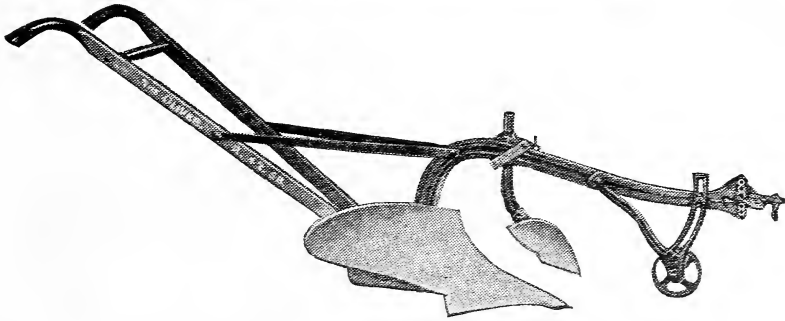


There are certain conditions in which it is necessary to be able to plow back and forth one side of the field, using alternately a right and left hand bottom. The Oliver No. 23-A Reversible Sulky provides farmers with a means of doing this kind of work with minimum effort. By means of a horse lift, operated by a foot trip, the operator can keep his eyes on his team and his hands on the reins. Adjustable bail block adapts the No. 23-A Sulky for three different sizes of bottoms. Through this adjustment, it is possible to keep the plow in direct line of draft, eliminating side strain on the beams. A guiding lever permits perfect line of draft, when the change of bottom is made. The Oliver No. 23-A Sulky is equipped with steel mouldboard.

Price on Application

## OLIVER PLOWS

### Nos. 42 and 43 Steel Beam Plows

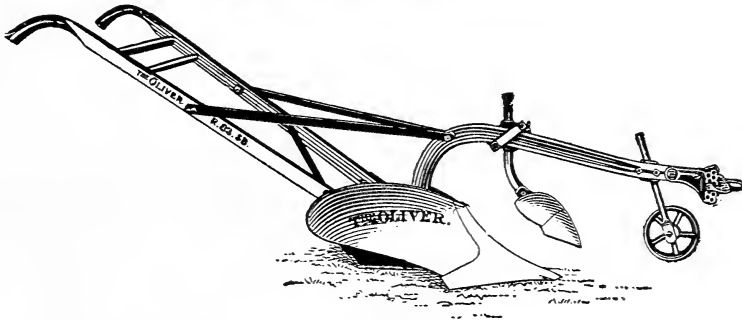


The turning and pulverizing shape of the mouldboard at the top and its bluntness in front make this an easy scouring plow, and it can be used to good advantage on level or rolling land, either sod or stubble. The beams are steel, with high arch for trashy clearance. The renewable landside shoe and chilled share make a plow that always runs with the proper suck and wing, no-matter how long it may be in use.

No. 42. Medium two-horse plow. Capacity,  $7\frac{1}{2}$  inches deep, 13 inches wide.

No. 43. Large two-horse plow. Capacity,  $8\frac{1}{2}$  inches deep, 15 inches wide.

### Nos. 82, 83 and 84



This series of plows is designed for those sections where a general purpose plow is needed to turn sod, raw land, clay and sand, and gravelly, stony soil. The long, curved mouldboard turns the deep furrow slice completely over, covering trash. The plows are steady running, light in draft, easily handled and heavily braced. This series of Oliver plows is made with steel mouldboards.

No. 82. Light two-horse plow. Capacity, 6 x 12 inches.

No. 83. Medium two-horse plow. Capacity, 7 x 13 inches.

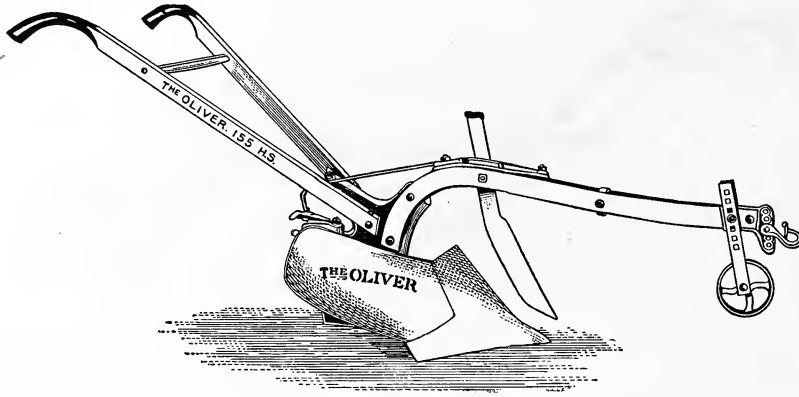
No. 84. Large two-horse plow or medium three-horse plow. Capacity, 8 x 15 inches.

#### PRICE ON APPLICATION

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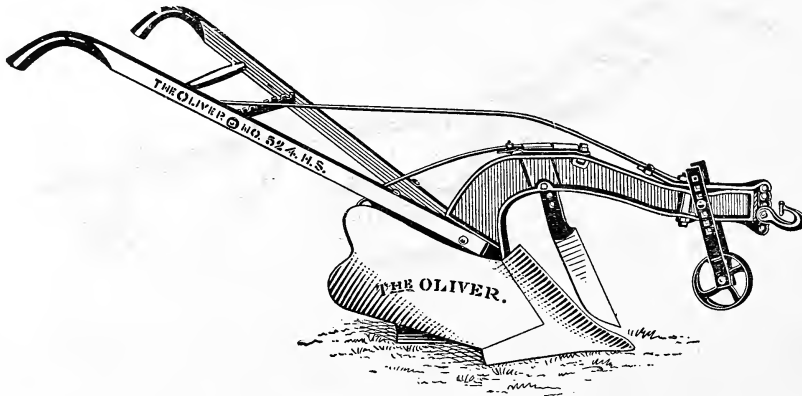
## Oliver Hillside Plows

### No. 155 Hillside Plow



This plow meets the demand of a light one-horse hillside plow. It is equipped with a hardened steel mouldboard and chilled shares. The mouldboard brace is separate and can be renewed without replacing the entire bottom. Mouldboard locks automatically, making it a very desirable plow for small farms, as it will work equally as good on sod as stubble.

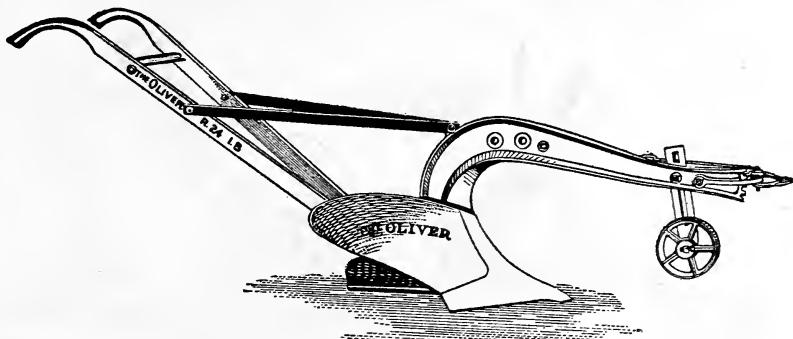
### No. 524 Hillside Plow



The Oliver series of hillside walking plows is built for use in hilly country and other places where it is desirable to plow back and forth across the same side of the field, without laying out lands. The Oliver No. 524, because of its lightness of draft, strong construction, and adaptability to both hillside and level field work, has found great favor with the farmer. The No. 524 is equipped with a steel mouldboard and chilled share. Its automatic hanging cutter is always in line with the cutting edge and gives satisfaction. A steel lever shifting clevis regulates the width of furrow. Shifting of the bottom is made easy by a conveniently placed foot lever. The Oliver No. 524 is regularly equipped with a gauge wheel. It has a capacity of 8 inches deep by 15 inches wide.

PRICE ON APPLICATION

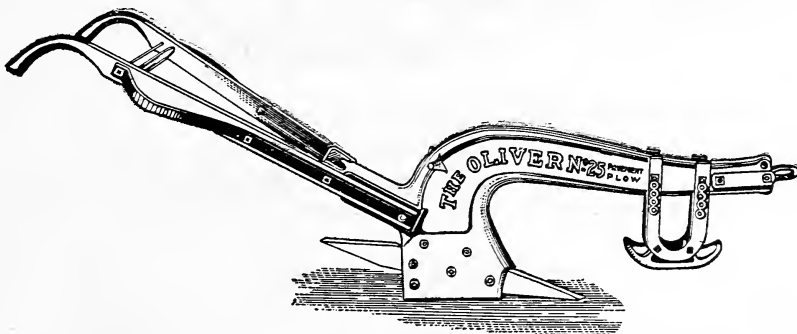
## Oliver Road and Grading Plow



NO. 24

The "Good Roads" movement which is now nation-wide is causing a great demand for road plows. For certain types of road work there is no better implement than the Oliver No. 24 Road and Grading Plow. This plow will break the hardest roads, as it is sturdily built. It can be used with horses or light tractors. The chilled mouldboard is long and deep for breaking the soil into lumps. The chilled cutter share is of a special deep suck type to insure penetration. Hanging coulter, jointer, gauge wheel or gauge share furnished extra on order. The capacity of the Oliver No. 24 is 7 in. deep by 14 in. wide.

## Oliver Pavement Plow



The Oliver No. 25 Pavement Plow

**"THE PLOW FOR THE CONTRACTOR"**

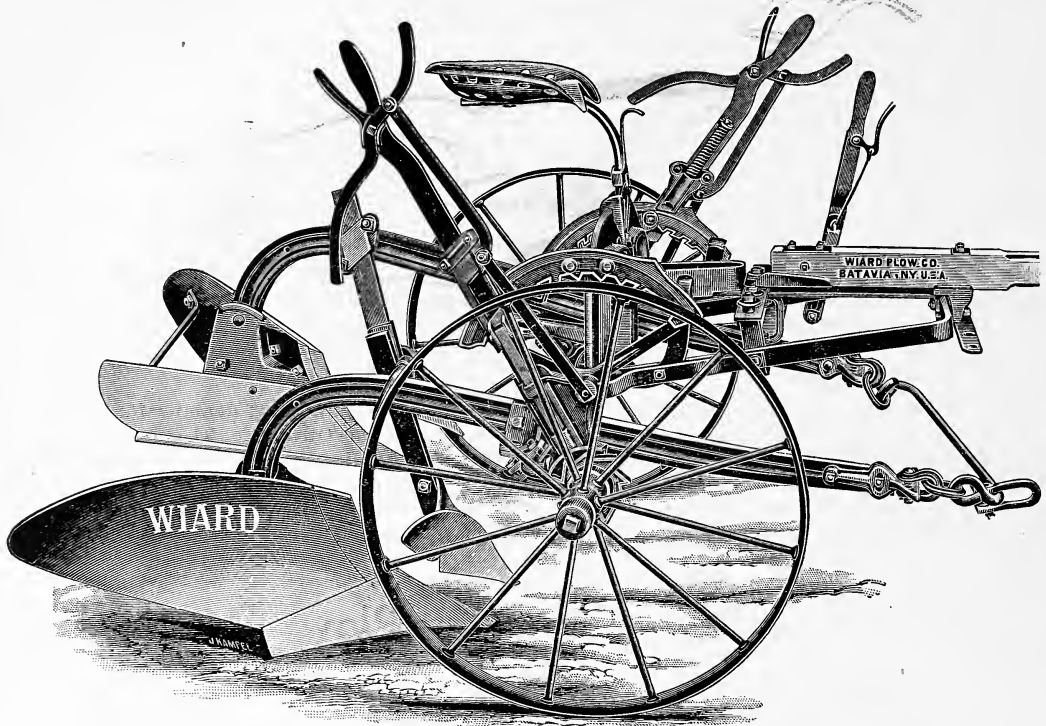
Contractors demand a plow like the Oliver Pavement Plow. It does the work and saves time and money. Note the adjustable and double reversible, crucible, self-sharpening spike steel point, the hanging adjustable gauge shoe with chilled wearing parts, the well-braced handles with loop handle wear irons, and its massive beam with extremely heavy upper and lower flanges, insuring plenty of strength. The point is made of the highest grade of steel, and being double reversible gives the maximum of service. This plow is as strong as it looks. It is built for a purpose, namely, to give the contractor a tool that will stand up under all kinds of hard work. The Oliver Pavement Plow is precisely the tool for breaking cobblestones, pavement or any unusually hard ground.

Price on Application

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## The Wiard Reversible Sulky Plow



### THE WIARD SULKY PLOW ALWAYS A LEADER

The Wiard (New Model) Reversible or Two-Way, Power Lift Sulky Plow (lift and trip operated by hand or foot), with Shifting Pole, Automatic Shifting Clevis and Adjustable Tilting Seat and Steel Wheels.

No. 400—Two or Three-Horse—Weight 550 Pounds.

### ADAPTED TO ALL SOILS

The Reversible or Two-way Sulky, is adapted to work in all soils, especially where the plowing is difficult, rough and uneven. For plowing flat land it is desirable to turn the land all one way, leaving no ridges or dead furrows. For work on side hills the soil can be worked all in one direction, and the plow by use of the levers can be leveled, and the seat can be tilted so that the driver avoids all discomfort.

As shown in the illustration, there are two plows, one right and one left hand, each operated by separate levers and having an **automatic power lift** which can be operated by the driver from the seat, either by the use of a trip lever operated by the foot, or by a hand lever which can be operated by the driver either when riding or walking. The plows have the highest grade **soft-center steel mouldboards**.

The Nos. 43, 103, 44 and 104 plow bottoms can be easily adjusted independently of the beam so that they will take more or less land as required, and when properly set the plows will run in a direct line, thus relieving all side strain on the horses' necks, hence it is not necessary to use the pole shift except in extreme cases.

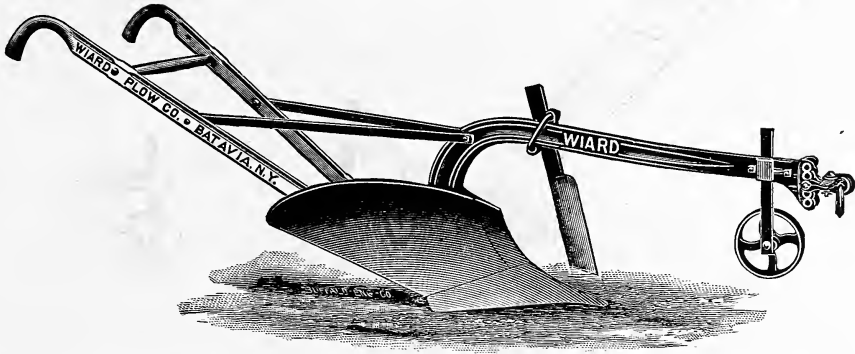
The device for adjusting the plow bottoms consists of a sliding wedge between the beam and plow standard, which can be adjusted very easily by loosening the bolts which hold the beam to the plow standard.

The sulky is perfectly balanced, so that whether the operator is on the seat or following the plow there is absolutely no weight on the horses' necks.

Price on Application

## Wiard Steel Beam Plows

### Nos. 43 and 44

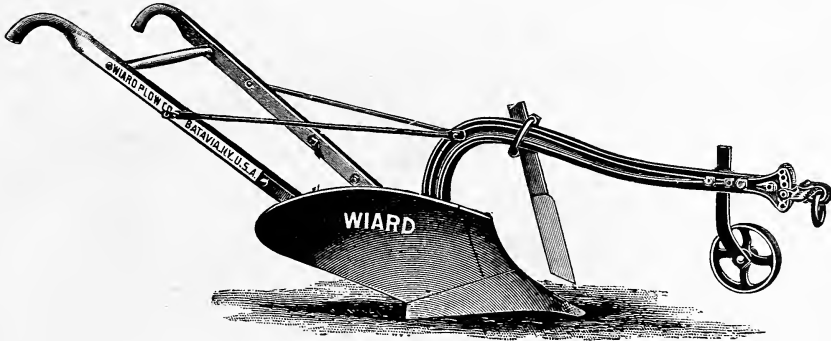


These plows are equipped with channel steel beams, highest quality, soft-centered steel mouldboards, "which is the strongest and most durable steel mouldboard made," adjustable handles, steel wheel standards. Can be furnished with either jointer or coulter.

No. 43. Capacity, 5 to 7 inches deep, 10 to 13 inches wide.

No. 44 Capacity, 6 to 8 inches deep, 12 to 15 inches wide.

### Nos. 524 and 526



The turning qualities of this shape of mouldboard are unequalled for plowing level or rolling land, sod or stubble. Equipped with soft-centered steel mouldboards, channel steel beams, coulters or jointers.

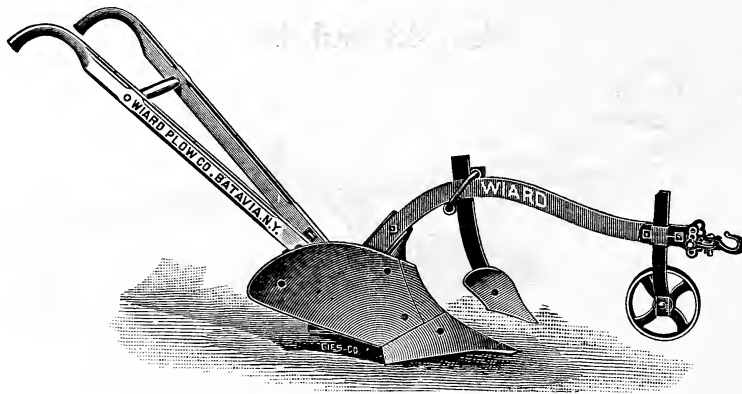
No. 524. Medium two-horse plow. Capacity, 6 to 7 inches deep, 9 to 13 inches wide.

No. 526. Large two-horse plow. Capacity, 7 to 8 inches deep, 10 to 15 inches wide.

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## Wiard Steel Beam One-Horse Plow

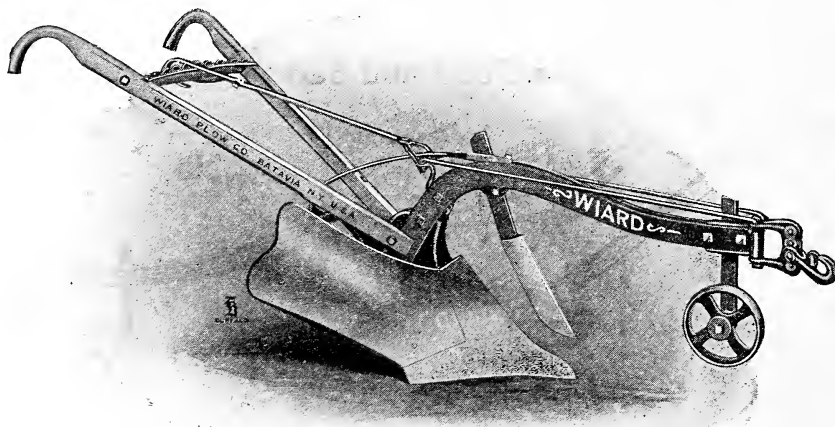


NO. 74

This very light, strong, durable plow is fitted with forged steel, one-piece beam, set for horse to walk in furrow. Equipped with steel mouldboard, adjustable jointer or coulter, white oak handles, adjustable sidewise, also can be raised and lowered.

Weight, 87 pounds. Capacity, 5 to 7 inches deep, 6 to 11 inches wide.

## Wiard Steel Beam Swivel Plow



NOS. 120 AND 126

Steel Mouldboard, Rigged with Jointer or Coulter

The illustration shows the shape and general construction of the Wiard reversible side hill plow—a little the best side hill plow we have ever seen.

No. 120. Light two-horse plow. Capacity, 5 to 8 inches deep, 10 to 13 inches wide. Weight, 118 lbs.

No. 126. Heavy two-horse plow. Capacity 5 to 8 inches deep, 12 to 15 inches wide. Weight, 139 lbs.

### SPECIFICATIONS AND DESCRIPTIONS

**Beam**—Forged steel, two pieces.

**Mouldboard**—Soft center steel, highly polished.

**Saddle for Mouldboard**—Malleable iron.

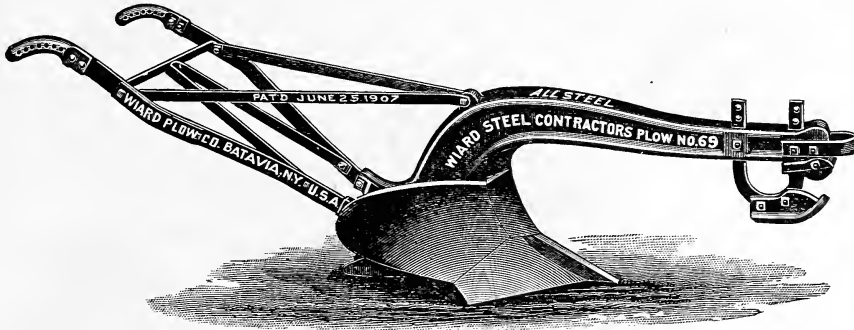
**Shoe**—Cast iron, chilled on bottom.

**Coulter or Jointer**—Adjustable, automatically shifted when mouldboard is reversed.

**Handles**—White oak, natural finish.

Price on Application

## No. 69 Wiard (All Steel) Contractor's Plow

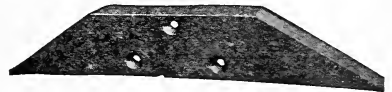


This plow is intended for use with either animal power, a traction engine or road roller. Weight, with clevis, 315 pounds.

We guarantee the steel beam on this plow against breakage for one year from date of sale.

This plow is very simple in construction, consisting of only nine parts aside from the braces and bolts. For all road or contractor's work for tearing up cobblestones and macadam, it can be used as a perfect rooter and pavement plow by simply removing the steel wing below the mouldboard, thus making a two-in-one plow for all-around work. Ordinarily, the contractor has one plow for general purpose or furrow work and another plow for rooter work or tearing up old pavements. This No. 69 does the work of both and answers for any and all purposes.

We would also call special attention to the main plow point. This point is made from a solid bar of forged steel  $1\frac{1}{4}$  inches thick, insuring great strength. It can also be reversed end for end, thus giving double wear.



No. 69 Main Point

### SPECIFICATIONS

**Beam**—One solid piece of cast steel.

**The Landside** is formed by this reversible point, which has countersunk bolt holes on both sides, into which bosses of steel beam fit, holding it most securely in place, protecting the bolts and preventing the possibility of their shearing off.

**Wing for Point**—A forged steel plate, extra strong and heavy.

**Mouldboard**—A heavy plate of steel, made extra thick at places where most wear comes.

**Shin Piece**—Above the point and in front of the mouldboard to protect it.

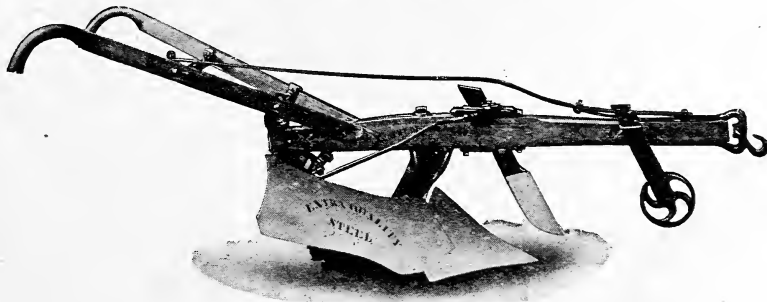
**Shoe or Heel**—At rear end of plow under heel of point to protect it and also gives pitch to the plow.

**Handles**—All steel (patented). They have the strength and will stand the racket and don't break or bend.

**Clevis**—Forged steel, made to wear and stand the strain.

Price on Application

## The Sargent No. 76 Plow



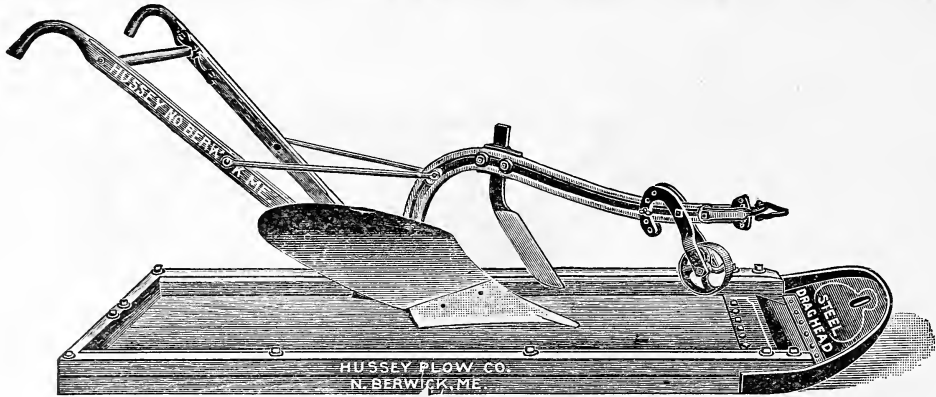
This series has proved very popular in New England. They are light weight, of good capacity and handle easily. These plows are made with steel mouldboard.

**76A. Medium Two-horse, Cast Share, Steel Board. 76B Light Two-horse, Cast Share, Steel Board.**

**76C One-horse, Cast Share Chill Board.**

Price on Application

## Hussey Plows



These plows are very strongly built, have the regular "Hussey" shaped mouldboard, which is so much liked by New England farmers, are made of the best materials throughout, are easily held, and are as nearly complete and satisfactory in every respect as the most critical can ask.

**No. 23. MEDIUM OR LIGHT TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.**

Cuts from 5 inches to 7 inches deep, 11 inches to 13 inches wide.  
Weighs, complete, 120 lbs.

**No. 26. LARGE TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.**

Cuts from 6 inches to 8 inches deep, 13 inches to 16 inches wide.  
Weighs, complete, 128 lbs.

**No. 28. LARGE THREE-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.**

Cuts from 7 inches to 9 inches deep, 14 inches to 18 inches wide.  
Especially adapted for breaking up new land.  
Weighs, complete, 162 lbs.

**No. 100. (Wood Beam.) ONE-HORSE PLOW.**

Cuts from 5 inches to 6 inches deep, 10 inches wide.  
Weighs, complete, 66 lbs.

**No. 102. (Wood Beam.) LIGHT TWO-HORSE PLOW.**

Cuts from 5 inches to 7 inches deep, 12 inches wide.  
Weighs, complete, 82 lbs.

**No. 104. MEDIUM TWO-HORSE PLOW.**

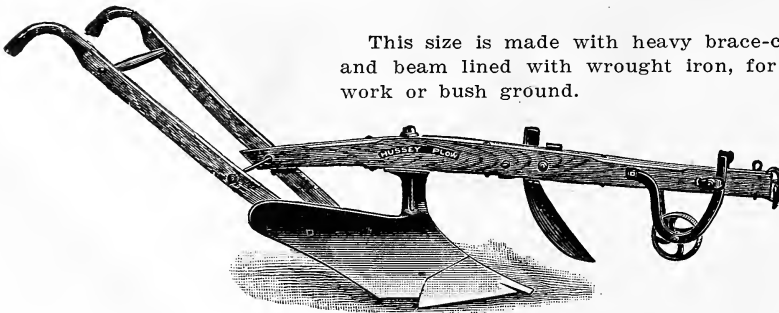
Cuts from 7 inches to 8 inches deep, 16 inches wide.  
Weighs, complete, 111 lbs.

**No. 106. LARGE TWO-HORSE PLOW.**

Cuts from 7 inches to 9 inches deep, 16 inches wide.  
Weighs, complete, 124 lbs.

**No. 108. (Wood Beam.) HEAVY ROAD OR BUSH GROUND PLOW.**

Cuts from 8 inches to 10 inches deep, 18 inches to 20 inches wide.  
Weighs, complete, 190 lbs.



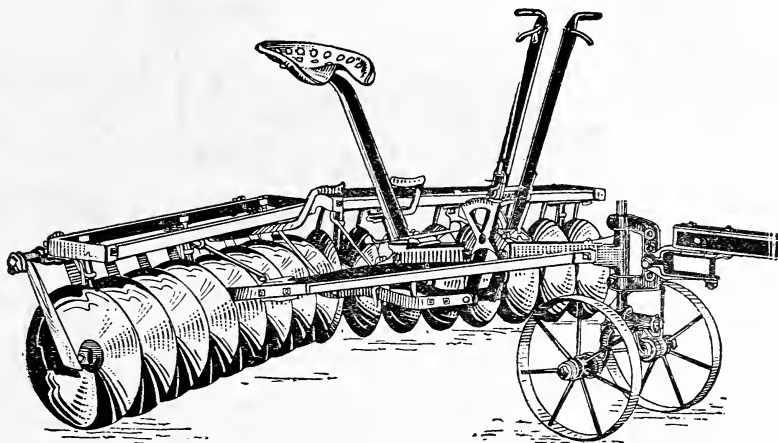
This size is made with heavy brace-cutter, and beam lined with wrought iron, for road work or bush ground.

Price  
on  
Application

WOOD BEAM HARD METAL PLOW

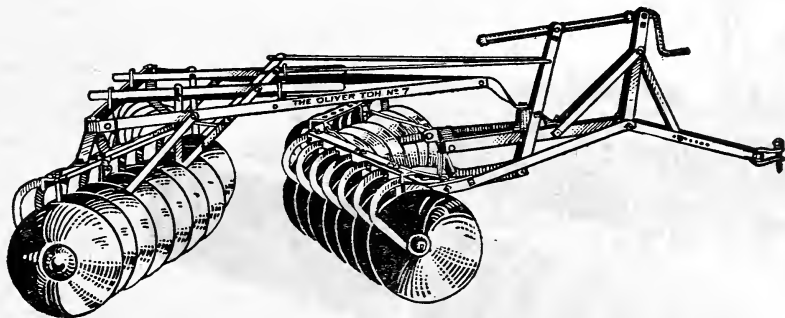
## Oliver Disc Harrow

WITH FORE TRUCK



On the Oliver "A" series disc harrow the gangs can be set at any angle for proper penetration of different soils. Just the right degree of disc curvature enables the discs to pulverize the soil to the desired depth. High quality spring steel scrapers are controlled by foot levers. Slat and control levers are so placed that the driver can be comfortable and at the same time adjust the gangs easily and conveniently. Frame, constructed from angle steel, is sufficiently large to make it strong and durable. The Oliver "A" Harrow is furnished in sizes cutting 6 feet wide with 16 or 18-inch discs.

## Oliver Tractor Disc Harrow



SPECIAL 6 FOOT SIZE FOR FORDSON TRACTOR

No farm equipment is complete without a good disc harrow. The best plowing only partially prepares an ideal seed bed. The Oliver TDH is specially designed for use with any standard light tractor. Its construction permits all four gangs to be set at more or less angle from the tractor seat without the use of a lever and without backing the harrow. All changes are made quickly and easily by means of a screw crank adjusting device accessible from the tractor seat. The gang connection pivot, being higher than point of pitch, converts the forward pull of the tractor into a downward pull on the gangs. This feature, together with the fact that the gangs can be set at a wide angle, assures ready penetration. The Oliver TDH Harrow can be furnished in 6, 7, and 8 foot sizes with either 16 or 18 inch discs. Weight pan furnished as an extra.

Price on Application



## Massey-Harris No. 28 Three-Lever Disc Harrow

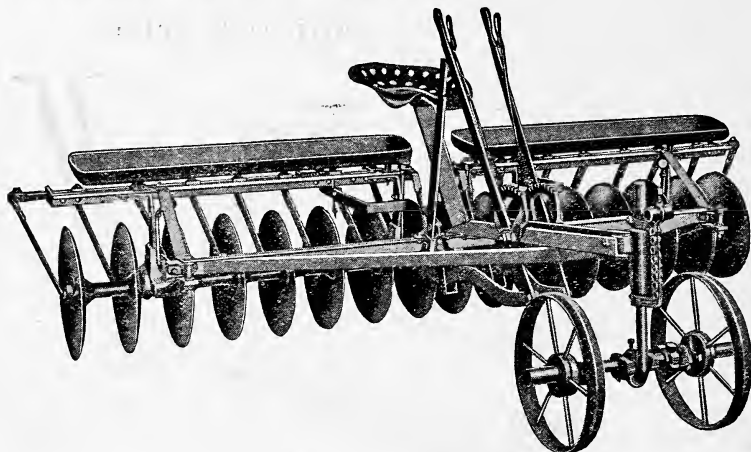
Both durability and efficiency are strong features of this harrow, as a glance at the illustration will immediately suggest. Throughout the construction particular attention has been given to all of the details, even to the bolts, every one of which that would have any tendency to work loose is provided with either a cotter pin or a lock washer to keep its nut tight.

Large convex center bumpers at the inner ends of the gangs successfully counteract the end thrust. When the harrow is at work, these bumpers roll on one another in the direction in which the soil is turned and take up all of the end pressure, relieving both the bearings and the frame from all strain.

A convenient hand pressure lever, fitted with a foot latch, controls the depth of cutting of the center discs. The discs can thus always be made to cut at a uniform depth, even when straddling knolls or furrows.

The standards are in three pieces, which facilitates the making of repairs, and are fitted with oil soaked, split hardwood bearings, which wear long and minimize the friction. The bearings are dirt proof and are lubricated by means of hard oil grease cups. Adjustable hoe steel scrapers, controlled by conveniently placed foot levers, are provided for cleaning the discs.

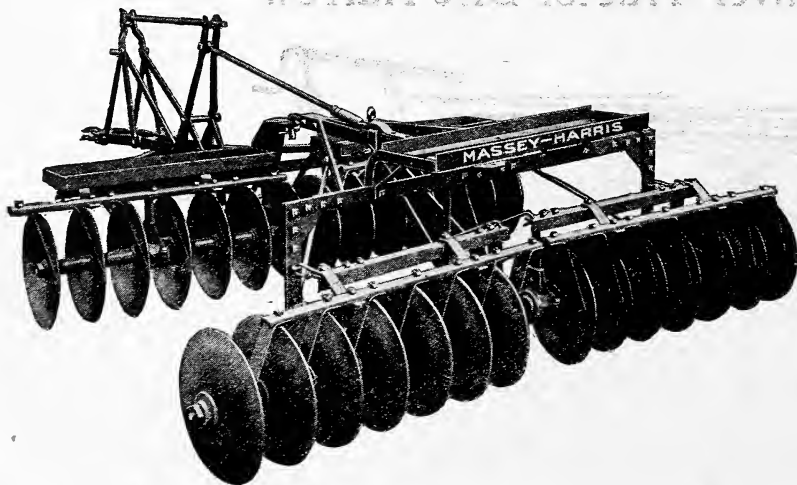
Price on Application



Size, 6 feet, with either 16-inch or 18-inch discs.  
Long pole can be supplied in place of tongue truck if wanted.

## Massey-Harris No. 30 Tractor Double Disc Harrow

Built Specially for Use with the Fordson Tractor, but Suitable for Tractors of Other Makes



Sizes 6 feet, 7 feet and 8 feet, with either 16-inch or 18-inch discs.

There is plenty of clearance for the frames, and the entire harrow is so built that the gangs have ample flexibility. Simple adjustments are provided for controlling the depth of cutting, and the rear gangs can be readily disconnected from the front ones if it is ever desired to use only a single harrow.

From the tractor back to the rear gangs the draft is in almost a straight line. Consequently, the harrow draws better, there is less wear on the standards, and better work and longer life result. Lathe-turned spools, with hardwood boxes, are used for the bearings.

Price on Application

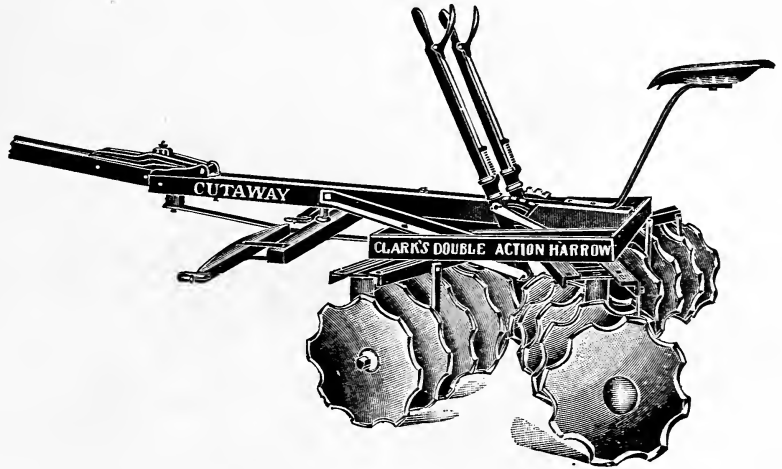
Strength is prerequisite to the success of any implement that is intended for use behind a tractor, and in the Massey-Harris No. 30 Tractor Double Disc Harrow that essential qualification has been given first consideration. This implement is designed purposely to supply a first-class harrow for tractor use and is well adapted to the rugged service incident to power farming.

Both sets of gangs are controlled by a crank screw operated from the tractor platform. This screw is mounted in self-aligning swivel bearings, which insures free and easy turning for all positions of the gangs. The rear gangs can be adjusted to cut at a different angle from the front ones if so desired.

## Clark's Double Action "Cutaway" Harrow

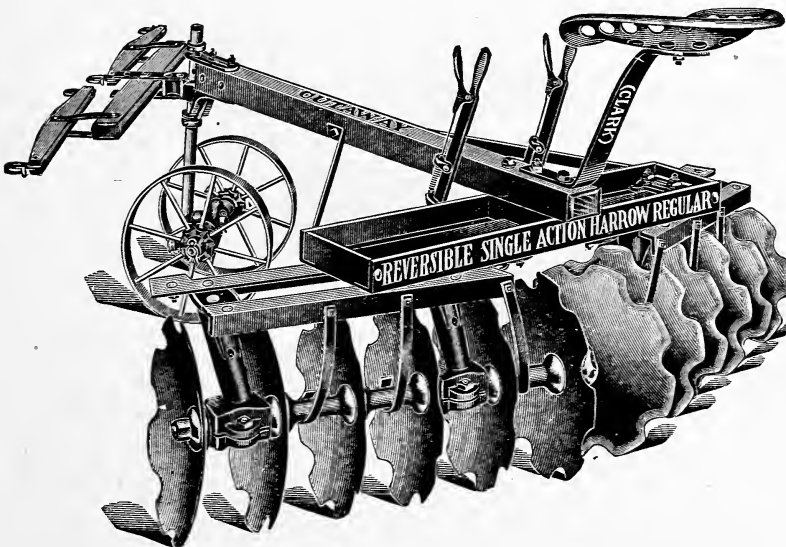
These machines have four gangs of discs, two in front and two in the rear. The front gangs loosen and break up the dirt and throw the dirt out; the rear gangs throw the dirt in. All four gangs are carried by a main frame that gives a very strong, unyielding connection between them. The rear discs are placed so as to track between the front discs, and the main frame holds the rear discs to their work, keeping them from dodging to either side and holding them in the ground, no matter how hard the land is. Any trash passing between the front discs is cut up and turned under by the rear discs, where it will turn into plant food. Having a four-point bearing on the ground, these machines run steady and true in the line of draft. The draft of these machines is very light, as the rear discs work in loose soil and consequently are drawn easily.

The whole machine, with the exception of the pole, is made of either iron or steel. The main frame and the gang frame side pieces are made of heavy angle iron. The strain of the gangs is taken up by angle iron bars, one above and one below the inner end of the gang frame. Both side pieces on each gang extend out between these bars. Heavy pipe standards are used, with the oil hole for the bearing at the top of the standard.



## Clark's "Cutaway" Single Action Harrow

REGULAR WITH TONGUE TRUCK

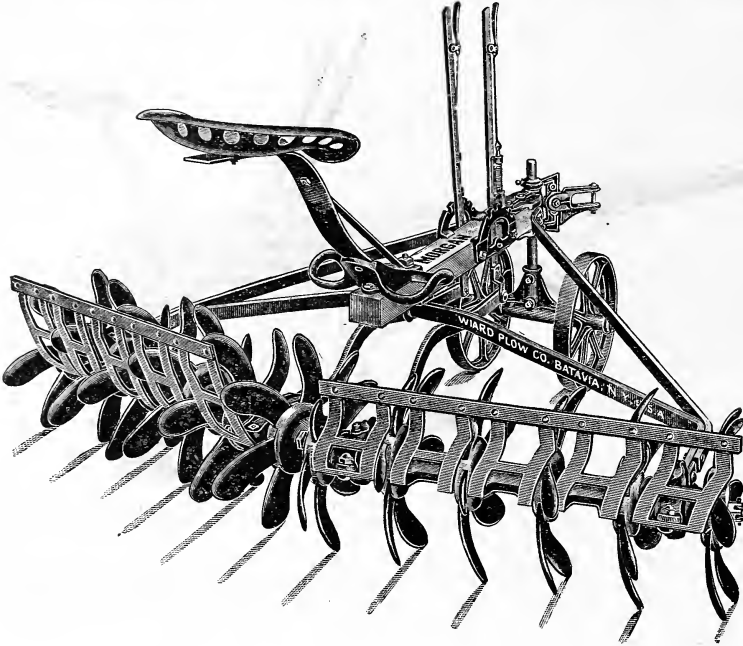


Why has this harrow won the support of practically every farmer who owns one? Because, first of all, it does the work; it is one of the most effective tillers ever put in the field. Second, its durability is almost unlimited. Third, it is convenient to handle and easy on the team. To reverse this harrow you simply disconnect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly. Like those on all other "Cutaway" implements, the discs on this harrow are cutlery steel discs, forged sharp. This feature partly accounts for the remarkably long serv-

ice always given by "Cutaway" disc implements. Forging compacts the molecules in the steel, making the disc much tougher than those sharpened in any other manner. It makes them retain a sharp edge long after ordinary discs are well worn away.

Price on Application

## Morgan Spading Harrow



### WITH FORE TRUCK

These harrows have the cleaner attachment, preventing loading or clogging. The frames are arched so that they will easily pass over uneven ground and any ordinary obstructions.

The Morgan Patent Spading Harrow leaves the earth finely pulverized and smooth without ridge or furrow. The action of the spades forms cup-like cavities in the under soil, which receive and hold the water from rains and dashing showers, conserving all moisture for the benefit of growing crops.

**For deep and fine cultivation no other harrow equals it.**

Two sizes, 12x16 and 12x18.

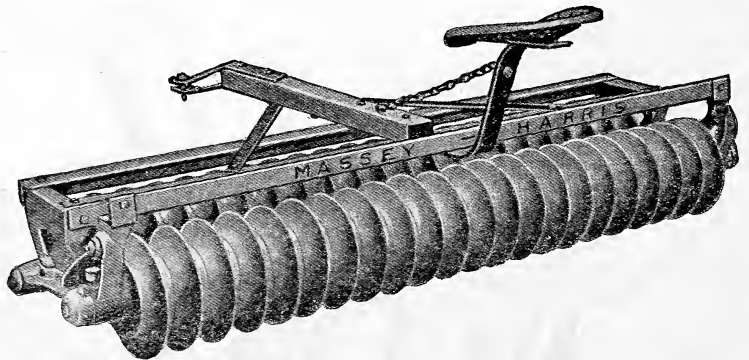
**PRICE, \$45.00**

## The Massey-Harris Soil Pulverizer

**A Combination Clod Crusher, Roller, Pulverizer and Packer That Saves Time and Labor and Increases Production**

This machine consists of two gangs, made up of a number of wheels that are so shaped that their faces form alternating series of sharp ridges and cup-shaped depressions. The ridges cut down into the soil, splitting all lumps with which they come in contact and pack out the open spaces. At the same time, because of the cup-shaped depressions, the surface is left in little ridges of loose mellow earth, which form a mulch blanket and retard soil blowing. The result is the lumps to a depth of five or six inches are thoroughly crushed, the soil beneath is firmed down, the surface is placed in excellent condition to receive and conserve moisture, and an ideal seed bed, with that continuous connection with the subsoil so necessary to the promotion and sustenance of plant life, is obtained.

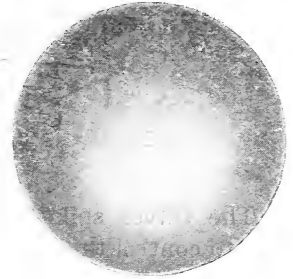
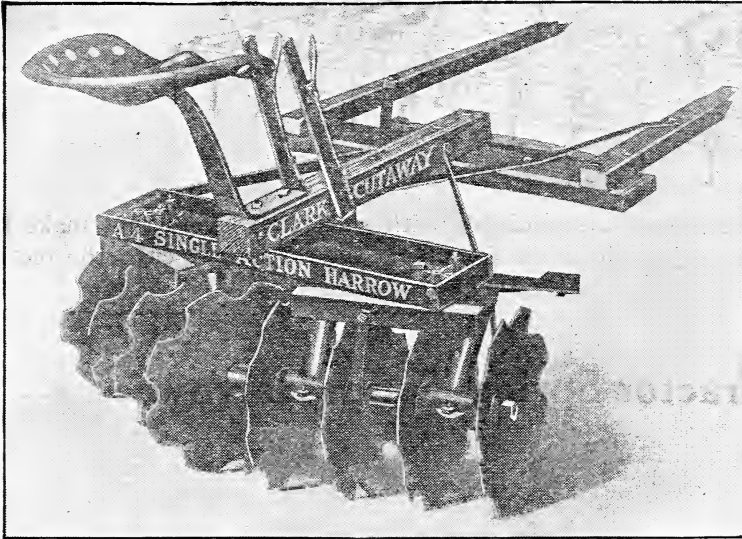
After seeding, should the ground become dry and baked, the pulverizer may again be used to good advantage. It will pack loose earth about the seed firmly and increase the moisture holding qualities. And there are also other purposes for which it can be used with splendid results. Indeed, there are so many uses for it, anyone who tills as many as twenty acres cannot afford to be without it. And there is nothing about the machine to get out of order or that requires fine adjusting. You may hitch to it as you please, it will always run and do the work for which it is intended.



**Supplied in Several Sizes and with a Long Pole; with a Combined Fore Carriage and Tractor Hitch; with just a Stub Pole Hitch; or with just a Fore Carriage as desired. Illustration Shows 8 Foot Size, with Stub Pole Hitch.**

**Price on Application**

## Clark's "Cutaway" One-Horse Harrow



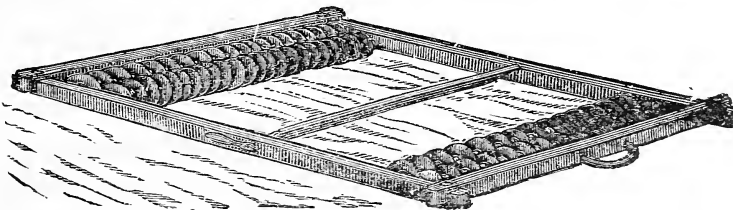
Either Cutaway or  
Plain

The Journals Are  
Hard Wood

It is made for the express purpose of meeting the needs of the man who has only one horse. By means of the "Cutaway" Harrow intensive tillage is made as economical and as practical for the man with a small outfit as for the man with large equipment. This machine is equipped with 16-inch Clark forged edge discs.

PRICE ON APPLICATION

## The Meeker Smoothing Harrow

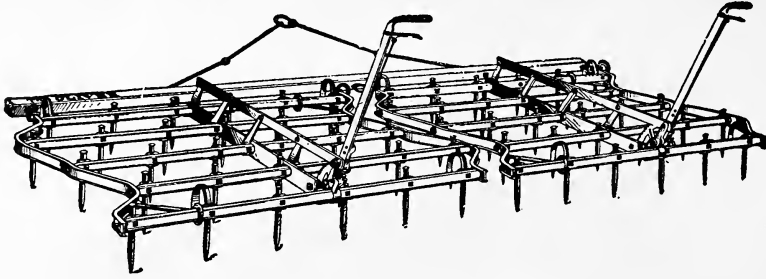


A Perfect Harrow and a Perfect Land Roller Combined

This harrow has become a great favorite among all classes of farmers and market gardeners in all parts of the country. It has two sets (four) of rollers containing fifty-eight steel discs. These discs grind all lumps and save the work of raking, and also mash small stones below the surface better than any field roller, leaving the land smooth and level. The discs of one roller work between those of the other, preventing clogging in damp soil. The board in the center is set at an angle, is adjusted up or down and serves as leveler.

PRICE ON APPLICATION

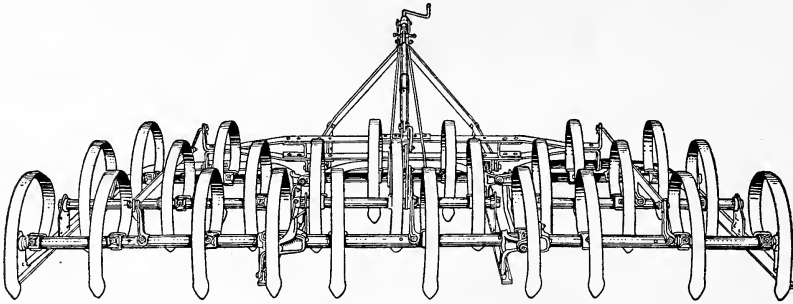
## **Oliver Spike-Tooth Harrow**



The Oliver spike-tooth harrows are equipped with side latch levers that make it easy to control the harrow and provide a grip for lifting the sections to clear the teeth of trash.

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## **Oliver Tractor Spring-Tooth Harrow**



The Oliver TPB spring-tooth harrow is leverless. A handy, quick-acting screw control, such as has been so successful on Oliver tractor disc harrows and plows, raises and lowers the teeth. This screw control is easily operated from the tractor seat without dismounting and without loss of time. With the outfit moving or standing, the operator can easily adjust the teeth so that they penetrate at just the desired depth. The leverless construction makes this harrow very suitable for orchard work, as there are no levers extending above the frame to catch on low hanging branches.

### **Adjustable Hitch**

The hitch can be adjusted so that the harrow runs level under all conditions. For instance, in very soft ground the hitch can be lowered so that the harrow will not bury itself.

### **T-Bar Frame**

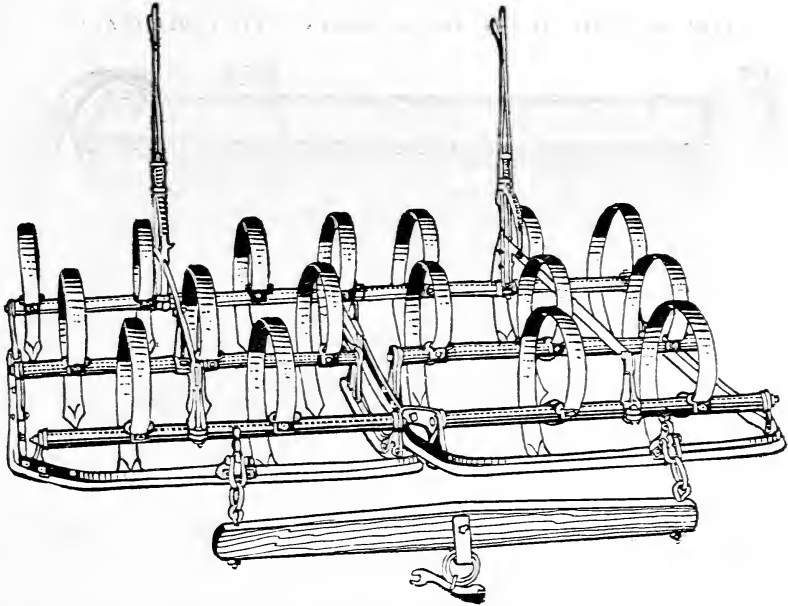
This harrow is equipped with an inverted T-bar frame, which greatly increases its strength. Fastened to the bottom of the frame are steel runners, which extend beyond the curve in the frame and protect it from wear. When worn, the runners are easily replaced.

### **Specifications**

Number of sections, 3; number of teeth, 25; weight, 497 pounds.

**PRICE ON APPLICATION**

## The Oliver Lever Harrow



Oliver spring tooth harrows are made in two sections, fifteen or seventeen teeth. They are made with channel bar frames with runners.

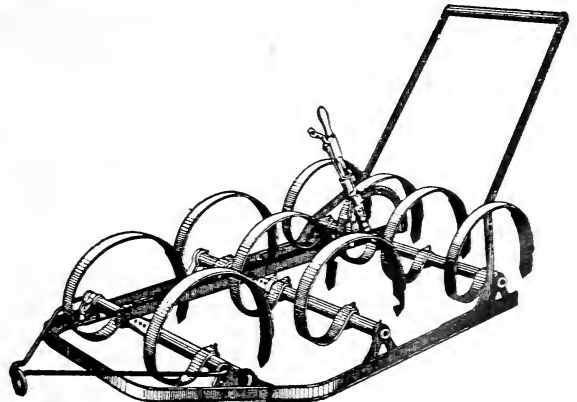
The sides of the frame form runners. The inside runners are cut off halfway to allow ample clearance for trash. Reversible steel shoes, one-fourth inch thick, bolted to the bottom of runners save wear on frame. The frames of the channel bar harrows are made of high carbon T stock. Design of tooth clip prevents teeth slipping or becoming loose. The tooth clip gives any amount of adjustment desired, and allows a large part of the tooth to be used. A lever on each sections also permits quick, positive adjustment of the spring teeth.

PRICE ON APPLICATION

## One-Horse Spring Tooth Harrow

A very popular harrow, used extensively for orchards, gardens and small farms. Made entirely of steel and malleable iron. Is controlled by the handles as easily as a cultivator. Frame is made of angle steel and is sloped at the front to avoid obstructions. Has renewable steel runners.

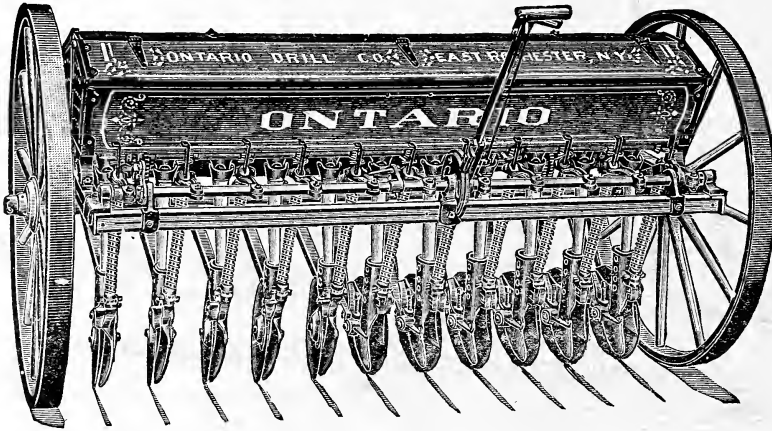
PRICE ON APPLICATION





## Ontario Combined Single Disc Drill

(FOR SOWING GRASS SEED, GRAIN AND FERTILIZER)



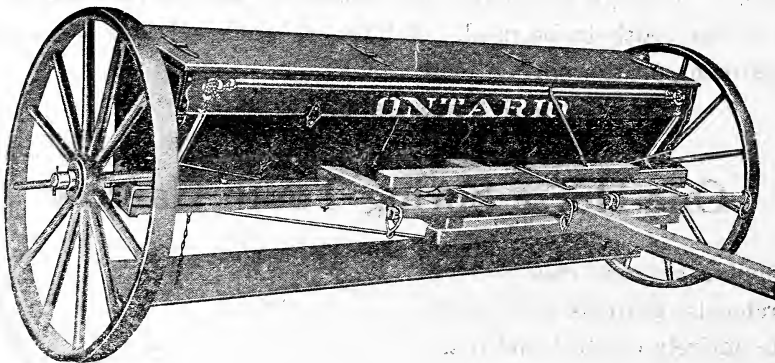
The most popular and best adapted style of drill for the New England States. In simplicity of construction, accuracy of operation and lightness of draft, it excels any machine in the world of similar construction and recognized merit.

## The Ontario Fertilizer and Lime Distributor

Style H

**SIMPLE, STRONG, DURABLE**

Sows Broadcast



One and Two Horse

Built to meet the demand for a simple, practical and comparatively inexpensive machine with which to distribute lime and fertilizer. The quality of the material used, the workmanship, the design and finish are all first-class. The parts are few, and are made not only with a view to efficiency, but for strength and durability. The mechanism is of the simplest form and easily understood. It is an honest, durable and practical machine, with exceptional value for the cost. Has proved a useful, handy machine for sowing dry fertilizers, such as plaster, ashes, lime, bone dust, cotton seed meal, salt, etc.

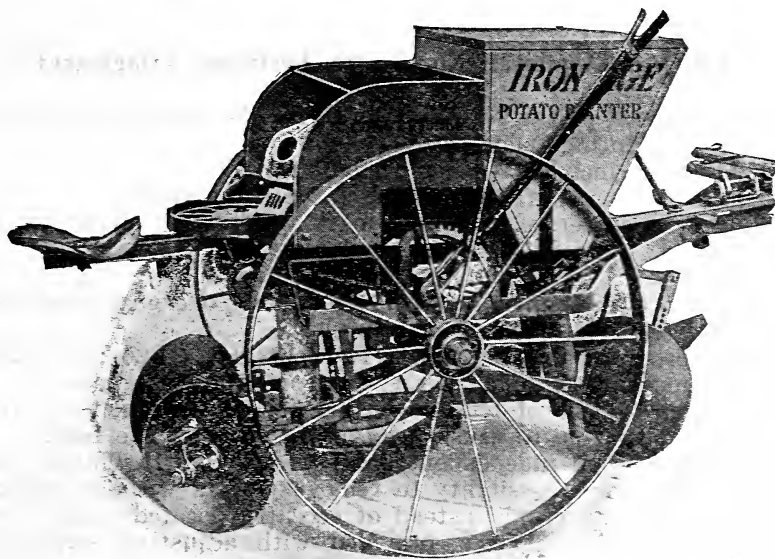
Price on Application

## Steel Land Rollers



Heavy steel heads are used, making fully closed ends. The rims or drums of these rollers are of the best material, of heavy gauge, and are firmly riveted to the heads. The hangers are of forged steel and are not easily broken.

## Iron Age No. 404-R Potato Planter

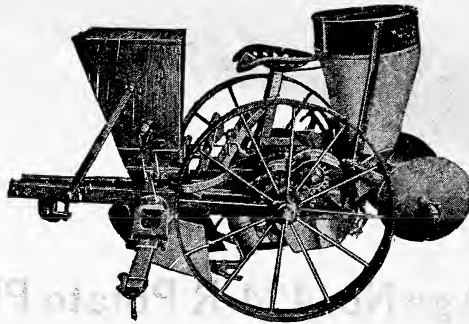


All potato growers admit that for absolute accuracy in planting nothing equals the IRON AGE Assisted-Feed Planter. In this machine a helper seated on the rear inspects the planting of every piece, correcting all "doubles" and "misses" such as are bound to occur because of the variation in size and shape of the cuttings. The opening plow leaves a small ridge down the middle of the furrow. The blade between discs holds all trash firmly against the ground, helping the disc to cut through easily and to avoid clogging. The fertilizer tubes—four unbreakable rubber spouts—spread fertilizer on each side of ridge as desired, where it is covered and mixed into the soil by the shoe which follows. The planting shoe splits the ridge, mixing fertilizer thoroughly with the soil on each side, makes a groove for the seed, which prevents its from rolling, and places it where it cannot come in contact with the fertilizer. It plants exactly in a straight line and at the exact depth desired.

Price on Application

## **McKenzie New Aspinwall Potato Planter No. 5**

About forty years ago, Mr. L. A. Aspinwall introduced the Automatic Potato Planter. The agricultural world was startled. Potato planting by hand was tedious, inaccurate and uncertain. Mr. Aspinwall's efforts were doubted at first, but were soon greeted with widespread enthusiasm and recognition. His Potato Planter proved its practicability, was developed and grew better and better. In 1921 the **New Aspinwall No. 5** was invented. This is indeed the most perfect potato planter ever built—it leads everything in the field—and has made potato planting a science—is absolutely accurate in every degree at an immeasurable saving of time and labor.



### **The New Aspinwall No. 5 with Fertilizer Attachment.**

A detailed description of the New Aspinwall No. 5—the machine that has opened a new era in potato planting follows:

Aspinwall general principles retained and improved.

Made to the highest manufacturing standards throughout.

Plow is nearer to center of machine, insuring uniform depth in planting and straightness of rows.

Perfectly balanced.

Gearing mechanism simplified and perfected; only one gear used instead of two when making change in distance of planting.

Planting distances: 9-10-11-12-13-14-15-16-17-18-20-22-24-26-28-30-32-34.

No wheel to remove in changing gears, just pull the cotter pin.

Magazine feed on outside of frame, causing both canvas hoppers to feed alike.

No eccentric in magazine to crush seed, or to obstruct the feed.

Picker head revolves on independent shaft provided with clutch, not subject to wear, giving the operator accessibility to remove pickers without turning gearing.

Feed gates operated by crank instead of eccentric located on the outside.

Outside of frame easily removed, provided with adjusting screws for accurate control of feed.

Disc covers may be removed without taking off drive wheels, and disc pressure is regulated by quick adjusting springs on top of the frame, free from contact with dirt.

Sheet metal hopper affords greater durability and is shaped to give the operator utmost ease.

Canvas sack hoppers are attached to metal extension by single hoop bolt, clamping sack hopper securely.

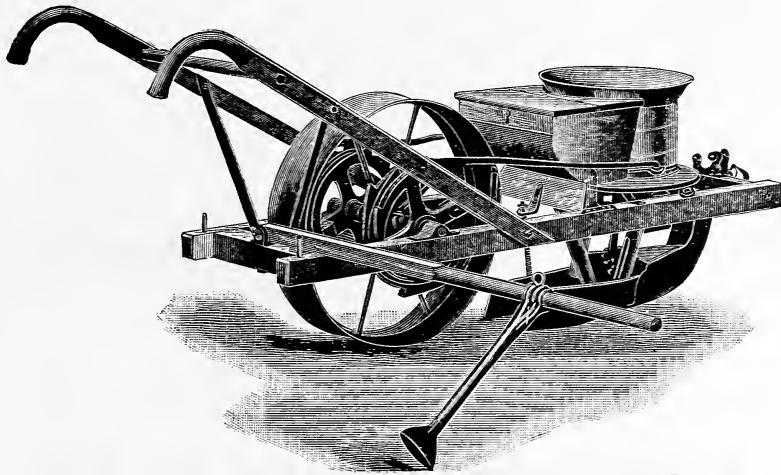
Complete with fertilizer attachment.

**The Most Perfect Potato Planter Ever Built.**

THE KING OF THE CORN FIELD

## Corn Planter and Fertilizer Distributor

Plants Corn, Beans, Peas, Beets and Other Seeds of Like Size



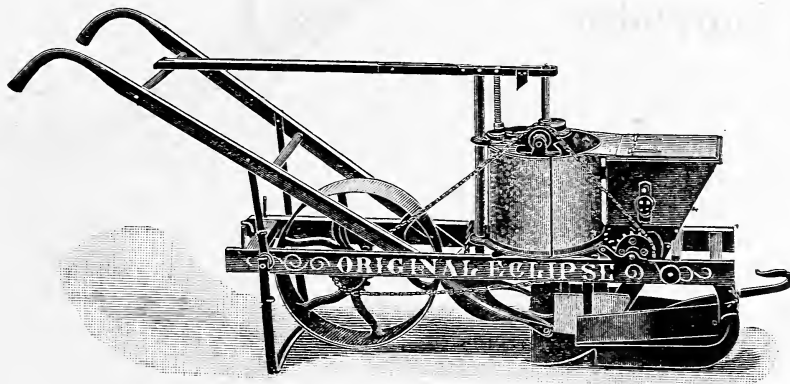
This planter is perfectly adapted to every requirement; durable and simple in construction, not liable to get out of order, and is arranged to drop any desired quantity of seed or fertilizer at a time, at equal and various distances apart, in hills or drills of uniform depth. The seed-dropping device is positive; never misses or skips a hill.

PRICE ON APPLICATION

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## Eclipse Corn Planter and Fertilizer Distributor

For Planting Field or Ensilage Corn, Beans or Peas, in Hills or Drills

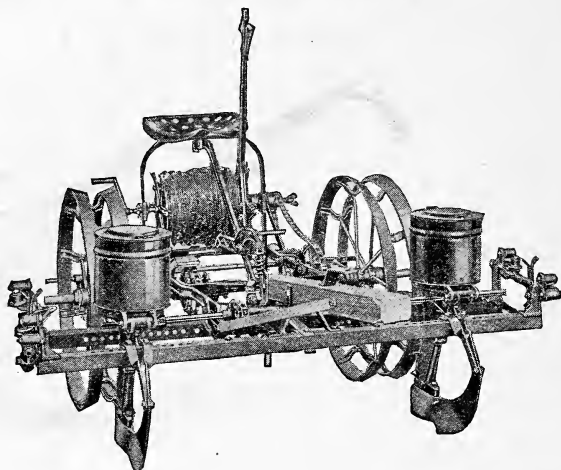


PRICE ON APPLICATION

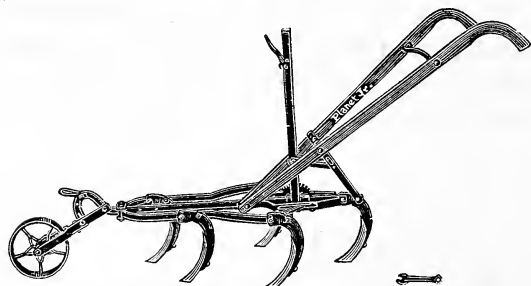
## Superior No. 24 Clutchless Corn Planter

BUILT FOR LONG SERVICE

Simplicity, strength and remarkable accuracy are the outstanding features of the Superior Clutchless Corn Planter. Either flat or edge drop plates can be used, and as the plates move steadily at all times almost perfect filling of cells is assured. Row adjustment is from twenty-eight to forty-eight inches, two-inch spacings. No clutch on feed shaft to get out of order. Double adjustable marker.



## Planet Junior Cultivator, No. 101

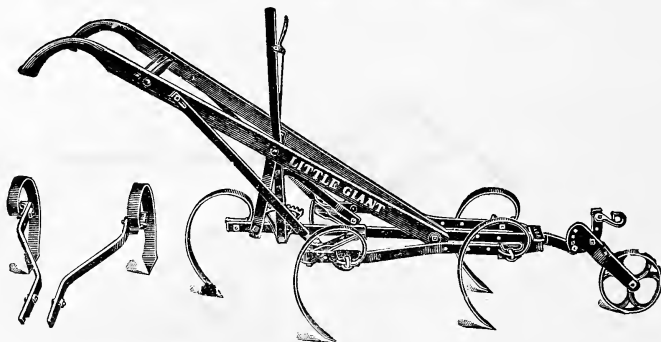


This all steel cultivator is complete with expanding lever and wheel, simple, strong, and easily handled, and has so few parts there is little danger of its ever getting out of order. Long wings if desired.

## Little Giant Five-Tooth Cultivator

The frame is of high carbon channel steel. Furnished only with lever spread outside handle braces and plain gauge wheel.

Seven tooth if desired.



PRICE ON APPLICATION

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## "New Model Centennial"

N. 8.—An extra implement at small additional expense.

The regular 5-tooth Horse Hoe, Cultivator and Coverer combined (No. 1), or an 8-tooth pulverizer on same frame.

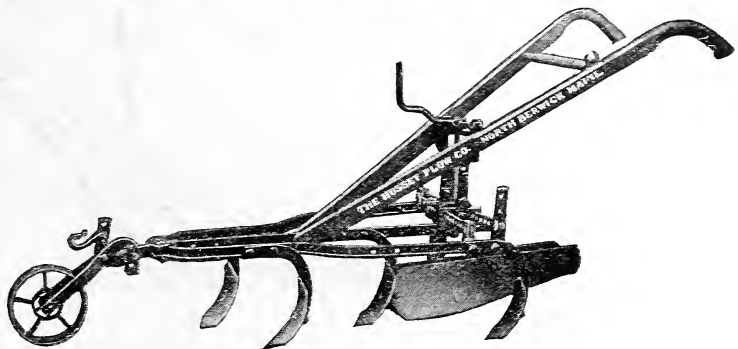
The long frame of the "New Model Centennial" allows us to add the extra teeth without danger of clogging.

No. 8 has eight 1-in. points, long wings and lever.

No. 1 has five 3-inch points, long wings and lever.



Back of Improved Point, 1 inch wide.



No. 1. New Model Cultivator

The "New Model Centennial" Horse Hoe, Cultivator and Coverer combined has long been recognized as an implement of unusual merit. The simplicity and fewness of parts required for changing it over to suit the various kinds of work to which it is adapted, and its unique and very efficient expansion lever, are among the reasons for its popularity.

An important improvement has recently been made in the one-inch reversible points for this cultivator. The illustration at the left shows the improved point with the strengthening flanges. It will

be readily seen that the flanged point is not only much stronger than the old style, but the flanges prevent the point from swinging around on the standard in rough and rocky land.

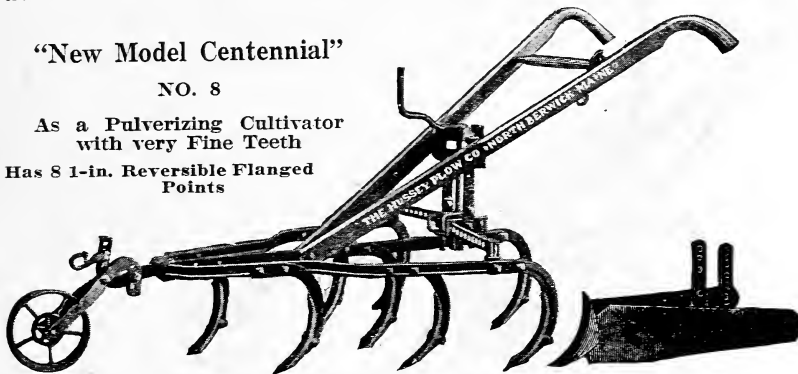
Equipped with eight of these narrow flanged points, the No. 8 is one of the very best pulverizing cultivators on the market.

### "New Model Centennial"

NO. 8

As a Pulverizing Cultivator with very Fine Teeth

Has 8 1-in. Reversible Flanged Points



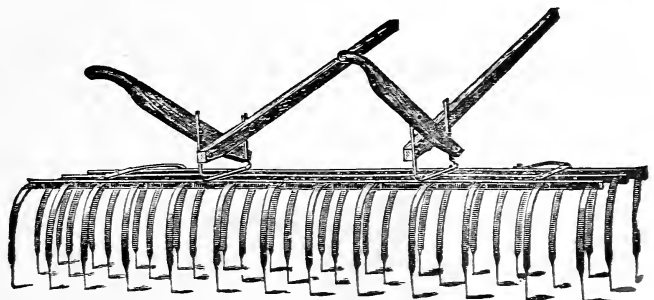
No. 8 as a Pulverizing Cultivator with Furrowing Wings Detached

PRICE ON APPLICATION

## The K. & W. Weeder

The attention of farmers is called to the great saving effected in time and labor by using the "K. & W." Weeder.

One of the best machines for level cultivation; will not injure the roots of the growing crops, but kills out the weeds, and leaves a fine mulch on the surface of the ground.

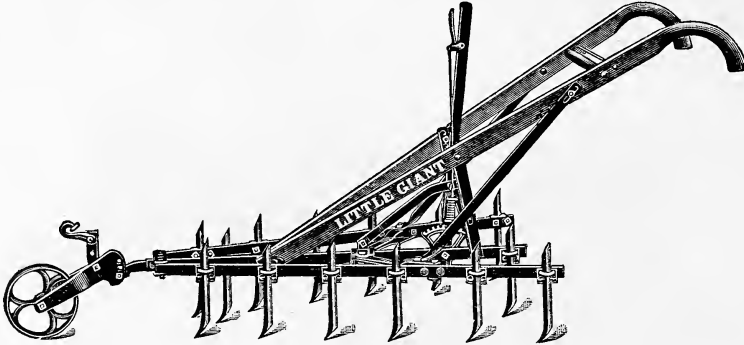


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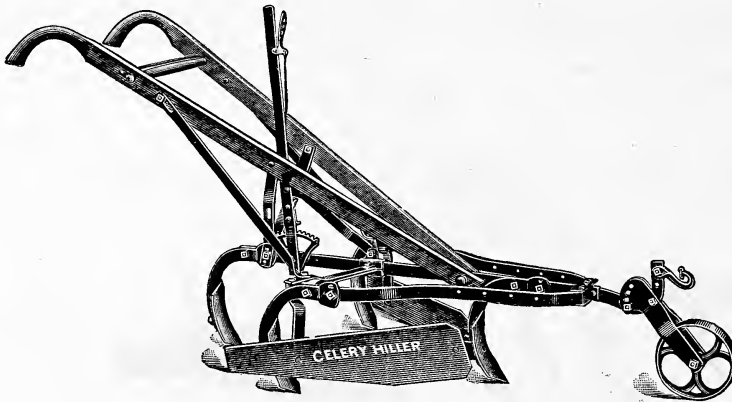
## Diamond Tooth Cultivator



As plainly shown in cut, the teeth are diamond shaped, with a small cultivator tooth forged on one end—steel, of course. For very close work, every other tooth can be quickly removed. Cultivating width, when equipped with lever expander, 34 inches.

Price on Application

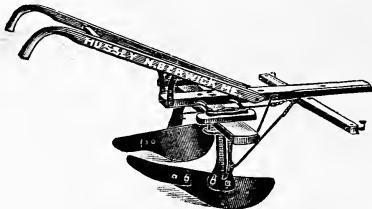
## Five-Tooth Cultivator, With Hilling Attachment



The hilling attachment is applied by simply removing four standards and placing the standard of the hiller on the middle bar and attaching the short standards of the blades to the side bars. This attachment is used in cases where higher ridging is desired than what can be accomplished with the regular horse hoe blades.

Price on Application

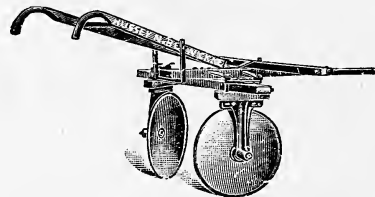
## Improved Potato Hoe, Furrower, Marker and Coverer



The Improved Potato Hoe is, as its name indicates, especially adapted for hilling potatoes, banking celery, and also as a coverer. It is much used as a "marker" for different crops, making the rows parallel and equally distant.

Price on Application

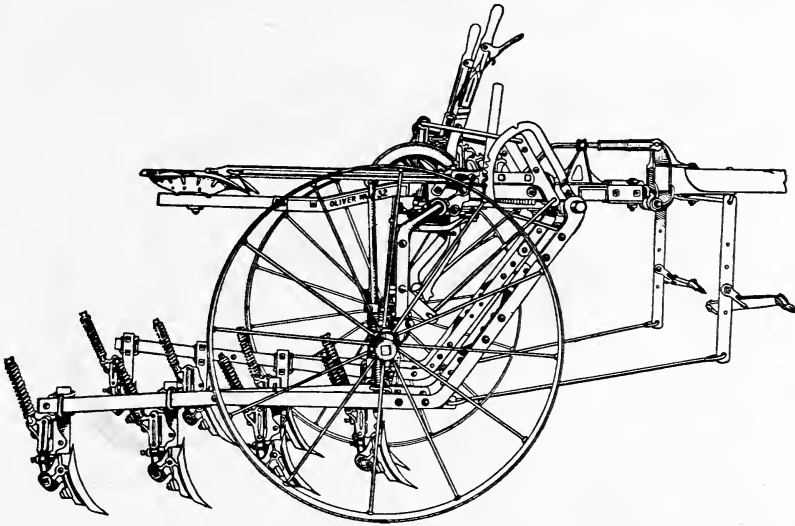
## "K. & W." Improved 20-Inch Disc Potato Hoe



Considered by many farmers the best hoe made for hilling and covering. A distinct departure from the styles commonly in use, the large discs doing smooth and perfect work.

Price on Application

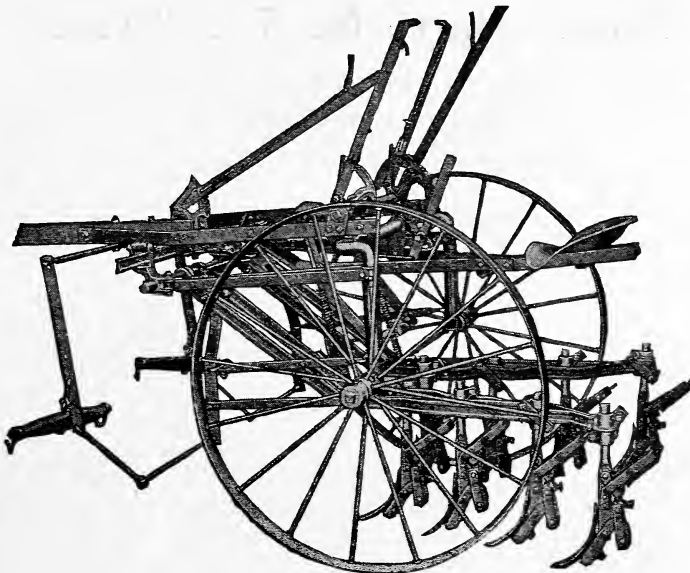
## **The Oliver No. 32 Cultivator**



This NEW Oliver No. 32 Cultivator has been thoroughly tested out in different parts of the country where conditions are difficult and has received the unqualified approval of the practical farmer. Disc attachment and shields furnished.

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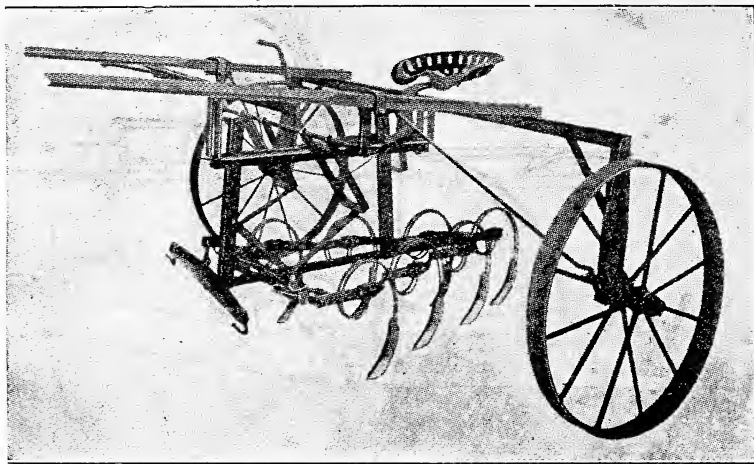
## **Buckeye No. 661 Cultivator**



Buckeye cultivation means easier work and best possible results, always. This high-quality implement is remarkable for simplicity of operation, lightness of draft, balance and flexibility. Convenient gang levers for depth adjustment. Beam action controls balancing device. Beam spacing lever attached convenient to driver. Tilting lever for quick leveling of shovels. Folding adjustable seat. Furnished with disc hillers.

**Write for quotations**

## A. W. R. Cultivator



With this implement a man or boy and one horse will do practically as much work as a man and team with a two-horse machine—do it easier, cheaper, and in most cases better. It raises with the foot, hay rake fashion, and is easily guided, as each side of the cultivator frame closes with slight foot pressure and opens automatically. Recommended for hilly and stony ground when equipped with the patented spring teeth.

"Hallock" style weeder, with special attachment, is easily attached in place of cultivator, making an ideal riding weeder.

Price on Application

## Massey-Harris No. 7 Cultivator

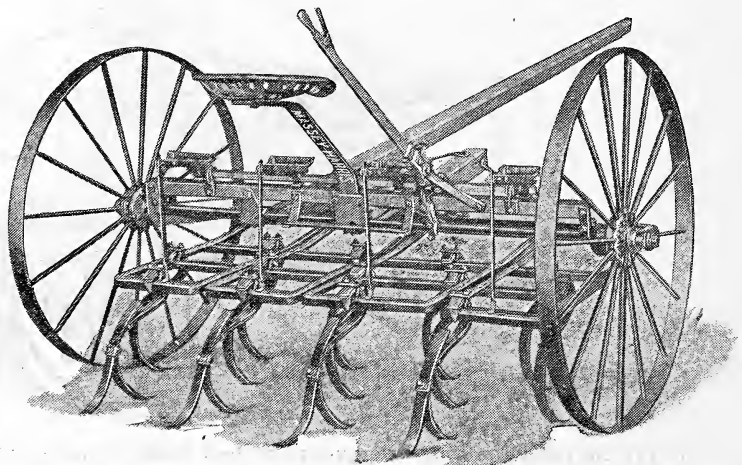
The Ideal Tillage Tool and Quack Grass Destroyer.

It Will Dig Up Hard Ground That a Disc Harrow Can't Touch.

For exterminating weed pests, summer fallowing land, breaking stubble ground and making seed beds this implement is especially suited. Its teeth are so controlled that they tear up the soil with short elastic vibrations which shake out the roots of the weeds and keep the latter from hanging on to them. Indeed, it actually digs up the ground, shakes it into a fine, loose mass and works the weed roots to the surface where they are soon killed by the wind and sun.

Spring pressure is a controlling factor. When pressure is applied, that pressure remains the same when passing knolls or furrows and a uniform depth of cultivation, be it deep or shallow, is thus always assured. Because of this feature there is never any bouncing of the teeth when clumps of sod or hard ground are encountered.

High steel wheels, 49 inches in diameter and with a 2½-inch face, which, because of their height and wide tires, facilitate the handling of the implements in the field.



Price on Application

## Massey-Harris No. 7 Manure Spreader

"The Spreader with the Strongest Front Bolster"

Has the Very Features You Want in a Manure Spreader

Low Down,  
Tight Bottom,  
Narrow Tread,  
Wide Spread.



A Two-Horse  
Machine That  
Is Built Strong  
To Last Long.

From whatever point of view you are of the mind to consider the Massey-Harris No. 7 Manure Spreader, you will find it mighty good equipment that will serve you to splendid advantage. It is of the most improved and convenient-to-use types yet developed; it has been tried and proven and it is offered to you with the warranty that it is well made of good materials and will do good work for you.

### IT IS EASY TO LOAD

Only 43 inches is the loading height at the rear wheels and the box is so narrow in width (being only 40½ inches) that you can load all from one side without the least difficulty. Yet there is ample capacity for from 60 to 65 bushels without using anything to increase the size of the box. The seat has a hinged mounting, which permits of tipping it forward when loading, so that it will be out of the way and will not get covered with the manure.

### DRAFT IS LIGHT

Everything about the machine is conducive to light draft. The wheels are high and broad-faced, with plenty of lugs at the rear to give positive traction, and the rear ones track with those at the front, the working parts are few in number and are always in perfect alignment, and friction is minimized at every point. Moreover, the team hitches close to the load, making it an easy matter to handle the machine at all times.

### SUITABLE FOR LEVEL OR HILLY PLACES

Being of light draft, having the high, broad-faced wheels that are so arranged that the front ones track with those at the rear, and being built low, with great stability, this machine is equally suitable for level and rough country. With it you can work up and down the hills or along the side of them according as you may prefer. The wheels will not slip to the side and when necessary they can be equipped with an effective, quick-acting, band brake.

### SPECIFICATIONS

Length of Box (inside)—9 ft., 5 in.  
Width of Box at Front (inside)—3 ft., 4 in.  
Width of Box at Beaters (inside)—3 ft., 5 in.  
Depth of Box (inside)—1 ft., 5¼ in.  
Height of Load—1 ft., 6 in., to 2 ft., 8 in.  
Width Over All—5 ft., 9 in.  
Width of Tread (both front and rear)—5 ft., 4 in.  
Wheel Base—8 ft., 2 in.  
Front Axle—Steel, Auto-type, 1½ in. diameter.  
Rear Axle—Steel, 1¾ in. diameter.  
Front Wheels—Steel, 28 in. diameter, 4½ in. tire.

Rear Wheels—Steel, 40 in. diameter, 5½ in. tire.  
Loading Height at Rear Wheels—3 ft., 7 in.  
Beaters—Two; steel, U-bar construction.  
Beater Drive—Pin link riveted chain from right rear wheel.  
Box—Tight bottom, wagon braced sides.  
Apron—Endless, with angle steel slats.  
Feed—Ratchet type, driven from left rear wheel.  
Hitch—Two-horse, with neck yoke.  
Width of Spread—7 ft., covering both wheel tracks.

Price on Application

## **Oliver No. 700 Spreader**

The Oliver No. 700 Spreader has many desirable features which make it an ideal machine for the dairy or hilly farm as well as a highly practical spreader for the average farmer. Some of these features are: Exceptionally light draft, wide spread, low down, narrow tread, and tight bottom.

An automobile type front axle makes possible short turns, prevents whipping of the pole and facilitates handling in the field.



Proper alignment and gather of the front wheels is controlled by a simple adjustment which can be made even after the machine has been long used.

The strong front and rear wheels of the Oliver No. 700 Spreader are steel with staggered spokes and have flanged tires with a channel in center. They are flanged sufficiently to prevent picking up dirt when spreading in soft ground. Rear wheels have permanent lugs. Compression grease cups furnish lubrication.

### **OLIVER NO. 700 IS LOW DOWN**

Since the loading height at the rear wheels of the Oliver No. 700 Spreader is only 3' 7" from the ground it is an unusually easy machine to load. The two beater construction permits extra high loads. The narrow tread allows driving through narrow barn doors, while the short turn makes easy handling around sheds and yards.

### **SIMPLE RATCHET FEED**

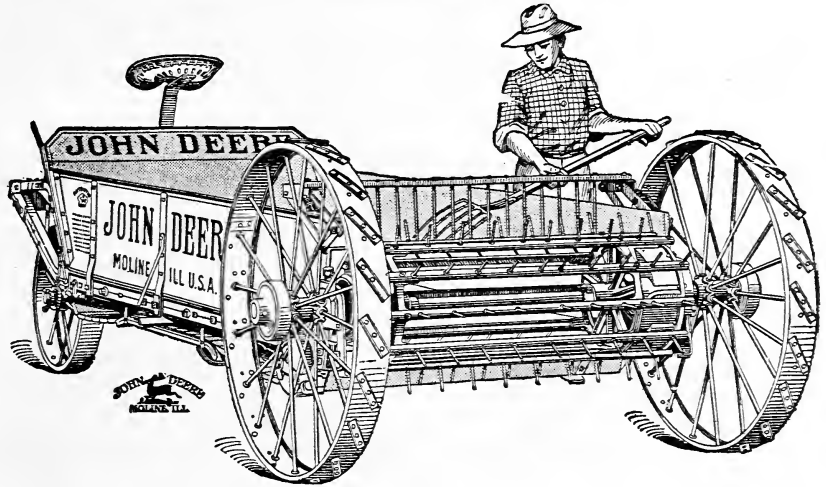
A simple ratchet feed on the Oliver No. 700 makes it possible to spread, 8, 12, 16 or 20 loads per acre. Both the upper beater and wide spread distributor are driven directly from and simultaneously with the lower beater.

### **DIRECT DRIVE**

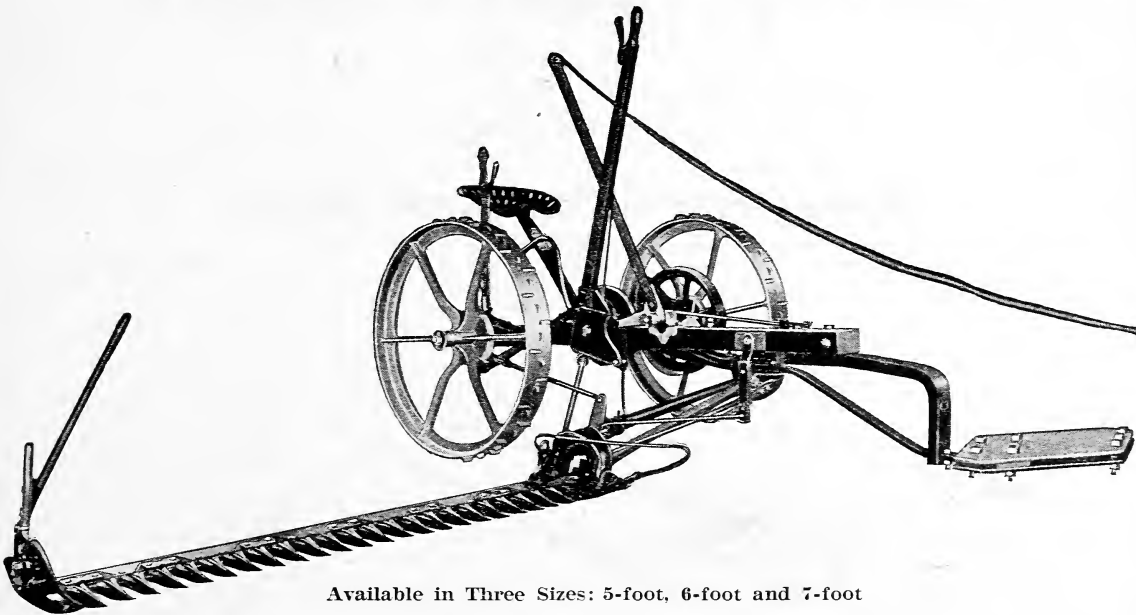
The beaters are driven direct from the rear axle by a large pin link chain which is controlled by a convenient lever and is so arranged that when the machine is thrown out of gear it disengages the sprocket. An adequate steel shield covers the chain.

## John Deere Spreader

The John Deere Spreader — the spreader with the beater on the axle — has only one-half as many parts as the simplest spreader heretofore manufactured. All its working parts are mounted on the rear axle. It has no chains, no clutches and no adjustments. Being low down, it is easy to load.



## The Ideal Mower for the Fordson Tractor



Available in Three Sizes: 5-foot, 6-foot and 7-foot

Offsets from the tractor sufficiently to cut full swath without tractor traveling in standing crop. Furnishes a strictly one-man proposition. Raising and lowering of bar for turning or for clearing obstructions can be accomplished from tractor platform.

### THERE ARE MANY OTHER SPLENDID FEATURES

Here Are Seventeen of Them:

1. Wide truck, 52 $\frac{3}{4}$  in. tread. 2. High, broad-faced wheels, 33 in. x 4 $\frac{1}{4}$  in. 3. Strong, one-piece main frame accurately machined. 4. Four pawls in each wheel. 5. Roller bearings in cages on main axle. 6. Self-aligning crank shaft bearing. 7. Strong, perfectly meshed gears. 8. Adequate oiling facilities. 9. Wide range of adjustments. 10. Long wood pitman. 11. Steel forged pitman ends. 12. Self-aligning pitman bearings. 13. Malleable iron, brass lined pitman box. 14. Adjustable push bars of large diameter. 15. Machine milled guards of improved design. 16. Perfectly lined cutter bar. 17. Vibrating swath board, with steel shoe.

Write for Quotations



## Massey-Harris Two-Horse Mower

A BIG, POWERFUL CUTTING MACHINE OF LIGHT DRAFT

Built only in the plain lift style in three sizes, 5 ft., 6 ft. and 7 ft.

With this mower you can cut all kinds of grasses and clovers to advantage. They are the outgrowth of an intensive study of the performance of different types under different conditions and embody the latest and most approved principles in mower building.

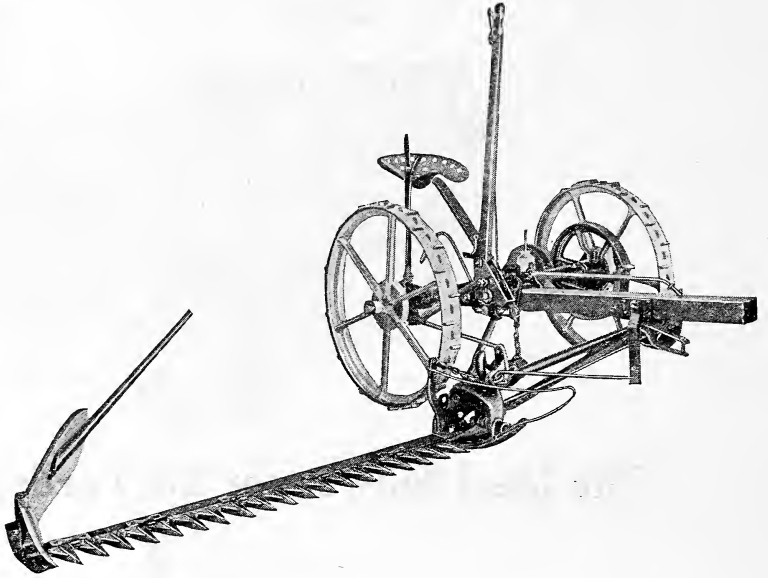
Strong, perfectly meshed gears transmit the power to the knife with comparatively no friction loss.

Splendid balance obtains. The gearing is located back of the axle, where, aided by drawing the machine from beneath the pole, it successfully balances the cutting apparatus.

Rough fields are readily mowed without straining the cutter bar. This is made possible by adjustments provided for the lifting spring.

The knife works without clogging. Its head travels in a close-fitting bearing on the inner shoe, for which the head is specially milled, and its sections are held to their work by a series of steel clips. Everything that comes between the guards is quickly cut.

Prices on Application



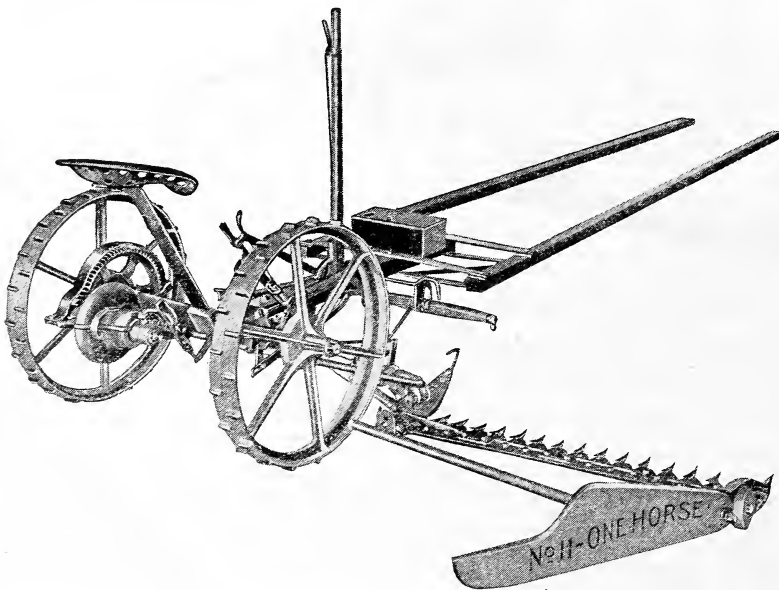
## Massey-Harris One-Horse Mower

Built in the vertical lift style in one size, 4 ft.

Width of Tread, 39 in.

Height of Wheels, 31 in.

Face of Wheels, 4 in.



This mower is especially designed for a strictly one-horse machine and well supplies the need of those who require one of that kind. It has ample weight and traction to cut all kinds of hay crops, and yet is of such construction that one horse handles it easily. Light draft is one of its salient features, and in combination with power and durability, makes it good equipment.

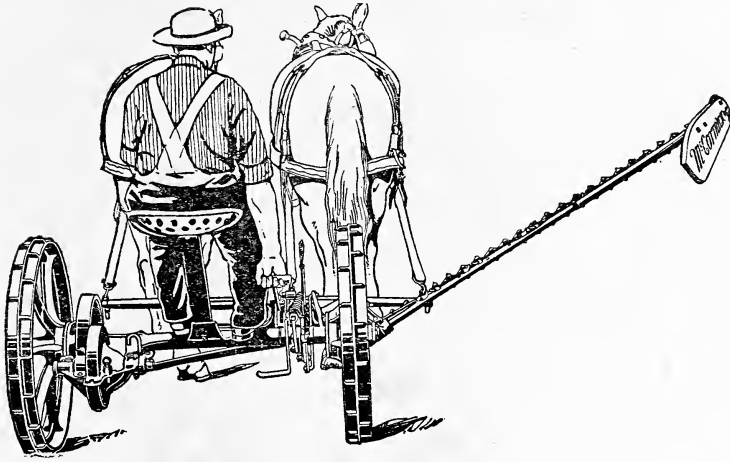
The main frame is in one piece, accurately bored to hold the gears and shafting in positive alignment.

Roller bearings are used for both the main axle and the cross shaft, where they reduce the friction to a minimum.

The cutter bar is of cold rolled steel fitted with malleable guards and shoes, all of which are aligned to insure knife working properly.

Prices on Application

## McCormick-Deering Mowers



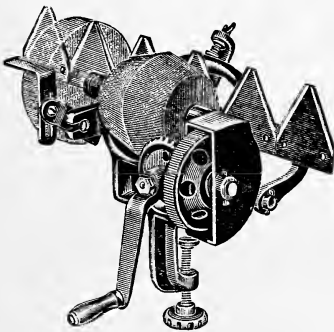
The McCormick-Deering Mowers are easy to pull and have a minimum side draft because of the ball and roller bearings used in their construction and the features which allow the cutter bar to follow the ground. When you buy a mower you want one that will cut the grass without clogging, without wasting grass or putting excessive strain upon the horses. The McCormick-Deering can be depended upon to do this work day after day and year after year, even though the conditions may not always be favorable.

Made in the following sizes: One-horse vertical lift, 4 ft.; two-horse, 5, 6 and 7 ft., plain lift.

Price on application

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## Modern Knife Grinder



May be handily and securely fastened to bench, table, or, while in the field, to the mower wheel.

The mower knife holder is capable of any adjustment desired, and firmly holds the mower knife with two guides or rests adjustable for any width or thickness of knife backs, and requires no change after the first adjustment; the spring clamp allows shifting of the knife to any position while grinding. The entire weight of the knife is carried by the holder, and the operator has full view of the work and easily controls the pressure and governs the grinding. Is equipped with vitrified corundum grinding wheels, the hardest, sharpest and fastest cutting abrasive known.

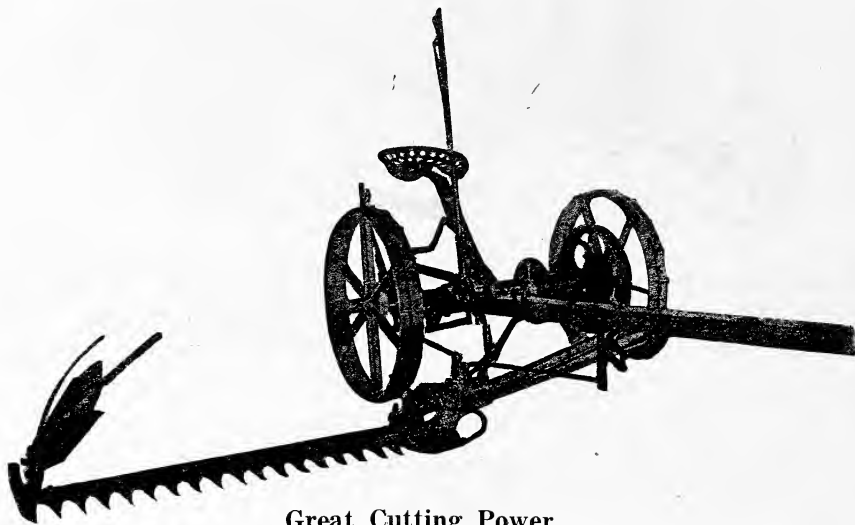
Price on application

# The Walter A. Wood Vertical Lift Mower

## Accurate, Keen Cutting and Long Lasting

The Wood Vertical Lift Mower is designed to supply the demand that exists in most sections for a general purpose mower that will meet all conditions—a mower that is light in draft, easily handled, of large capacity—that will do good work from the lightest to the heaviest cutting, on level or on hilly ground. In this capacity, it has proved itself to be the best mower of any kind ever put on the market by any concern in the world.

To those whose cutting is done under conditions that require the Vertical Lift feature, as well as to those who simply want a mower that will give them the best general results, we offer the Wood Vertical Lift Mower upon the basis that it will give them the highest degree of satisfaction.



## Great Cutting Power

This mower has more weight on the drive wheels in proportion to total weight than has any other "rigid frame" mower. It is so designed that the drive wheels have no tendency to lift from the ground—even in the heaviest cutting. Consequently, the full tractive power of the machine is utilized for the purpose of driving the knife and the mower will continue to cut where other mowers would fail.

## Lasting Non-Friction Bearings

Every bearing is made of the material that gives the least friction under the conditions at the point at which the bearing is used. The main axle bearings are of the roller type; the cross shaft revolves in grey-iron bearings; the crankshaft bearings are bronze.

## Flexibility in Cutting Under All Conditions

The cutter-bar will droop smoothly to an angle of fifteen degrees; or in other words, the outside shoe will droop sufficiently to enable the bar to cut wherever any mower could be expected to do good work. The bar droops so rapidly that it readily follows all unevenness of the ground. This range of droop is adjustable.

## The Long Lasting Cutter-Bar

The shape of the guards effects the best operation of the knife and prevents the gathering of mud or other materials under the knife back and sections. The steel rub plates are placed close together along the entire length of the bar and provide a lasting surface for the knife to work on. The sickle holders are placed close together and afford a large wearing surface for the section that will not rapidly wear away. Every cutter-bar is rigidly inspected before it is permitted to leave the factory.

Other good points which can only be mentioned here are:

The cross shaft is easily adjusted or removed. The tilting adjustment enables close and rigid tilt of the bar. The knife starts the moment the team does. The pitman thrust is direct and powerful. The internal drive gear gives great power to the knife and is long lived.

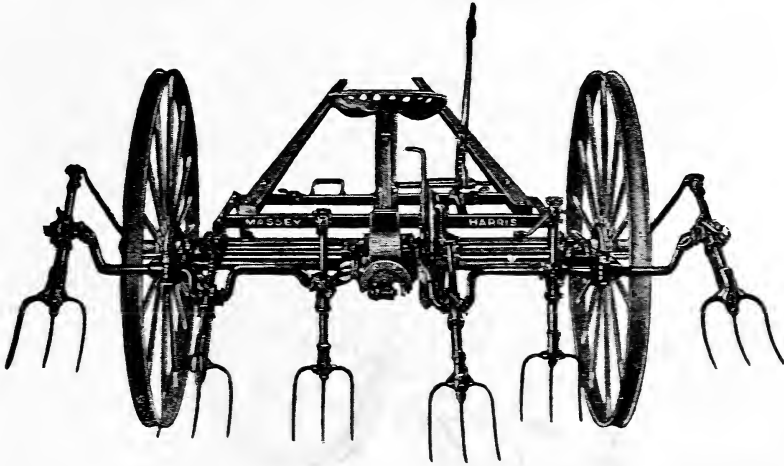
## The Product of Sixty-Seven Years' Development

Wherever this mower has been introduced in this country and abroad it has been pronounced by dealers and farmers to be the best mower in every essential that has ever been put on the market by any concern. It is the latest product of an experience that started in 1852 and that has been gained in every country where mowers are used.

Made in the following sizes: 4 ft. one-horse—5 and 6 ft. two-horse.

## Massey-Harris Steel Hay Tedder

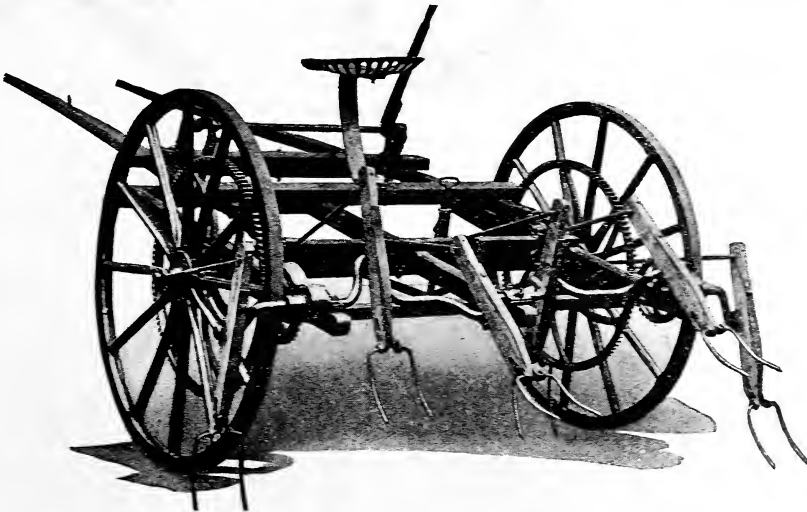
Six Fork Size Equipped with Combination Thills and Pole



Good hay under the most adverse conditions is possible when the services of this implement are employed. It kicks up the swath into a loose, fluffy mass through which the air circulates freely, with the result the curing process is hastened and hay of a high quality is obtained. And, besides, it's built in such a way that it will give many years of satisfactory service.

Price on Application

## The Bullard Hay Tedder



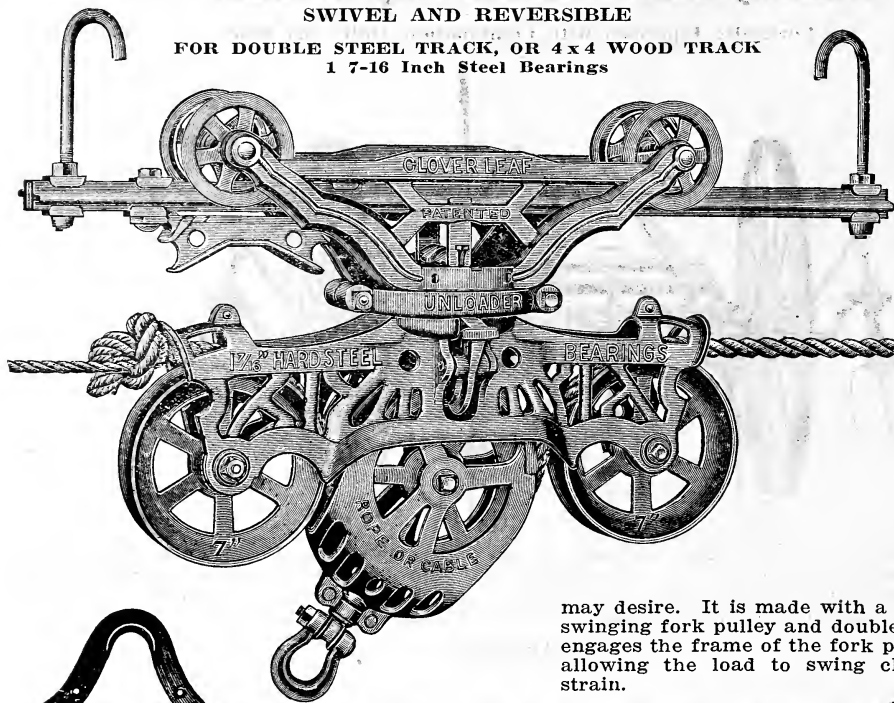
Takes the hay up from the bottom, shakes it in the air and leaves it lightly on the ground for the sun and air to complete the work of hay making. Does not shake to pieces. Is elastic but tough. The crank shaft split in the middle makes it easy for the horse to turn. Two tensions springs on the tilting frame, together with the new Mudgett fork springs, prevent breakage of wood arm. The forks on either side are driven independently by the wheel nearest them, so that this tedder can be turned while it works, without straining the tedder or horse, and do good work all the while. If you want to get a tedder that will do its work in the right way, with the least fuss and bother and that gives you the most lasting satisfaction, buy a Bullard.

Price on Application

## Myers O. K. Steed Track Carrier, With Steel Bearings

SWIVEL AND REVERSIBLE

FOR DOUBLE STEEL TRACK, OR 4x4 WOOD TRACK  
1 7-16 Inch Steel Bearings

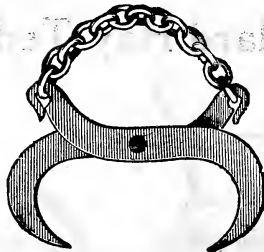


This carrier is made of the best annealed malleable iron, thoroughly braced, which insures strength sufficient to withstand the most severe usage. The ropes/heaves are 7 inches in diameter with 1 7-16 in. turned steel bearings. This style of bearing will give more service and is easier to operate than any other style of sheave. The fact that you can use rope or cable for draft is a special feature used only on the Myers and enables the farmer to use either style he

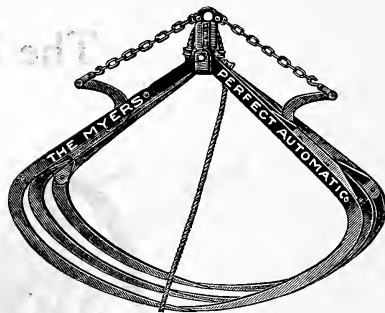
may desire. It is made with a large open mouth, swinging fork pulley and double force lock, which engages the frame of the fork pulley on both sides, allowing the load to swing clear, avoiding the strain.



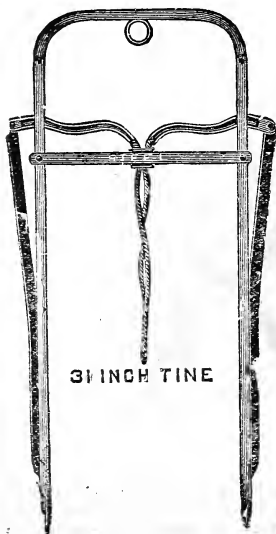
Rafter Bracket



Steel Rafter Grapples

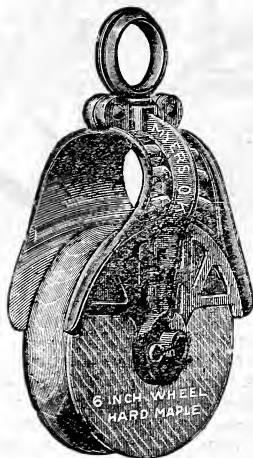


Grapple Fork

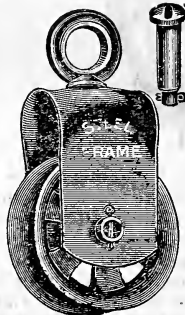


DOUBLE HARPOON FORK

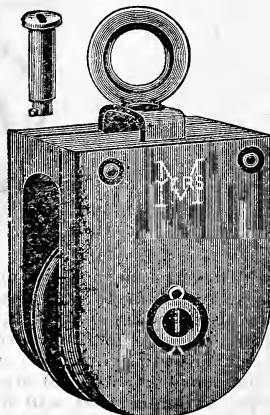
Made from wagon spring steel, which will not bend or spring out of shape.



Knot Passing Pulley



Steel Frame Pulley

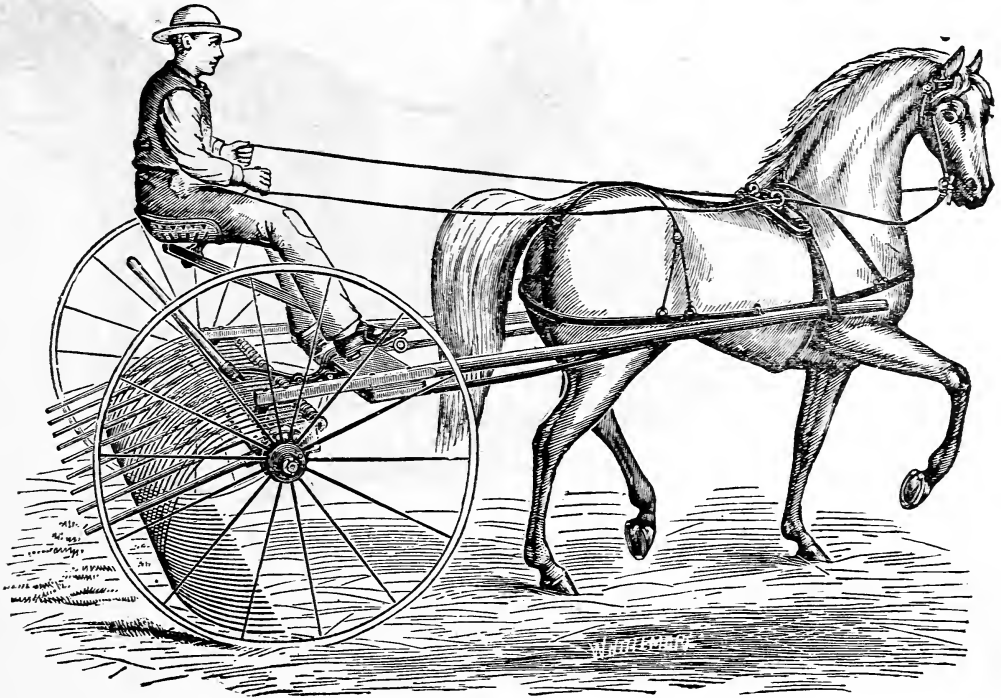


Reed Pulley, with Hook or Eye

WRITE FOR QUOTATIONS

## The Original Yankee Rake

Some of the Leading Points of Superior Excellence Found in the Yankee Horse Rake



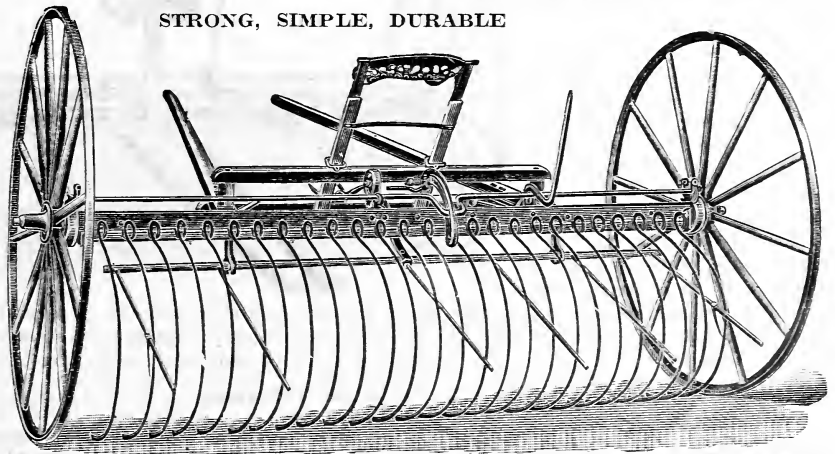
Simplicity in construction and excellent quality of materials. Adaptability to rake anywhere, whether the fields are rough or smooth or the hay green or dry. Rake head adjusted so as to balance the weight of the teeth. This device completely prevents the teeth from dragging heavily and digging into the ground or filling the hay with dirt and dust. Teeth run level with ground at their points. Each tooth is perfectly independent in action and supplied with a yielding spring that will allow it to pass safely over any obstruction that the axle can pass over.

## The "Genuine" New York Champion Hay Rake

A "Genuine New York Champion" means to many thousands of farmers the standard of all rakes—one that is always in perfect condition whenever it is wanted. It cleans the ground thoroughly without taking up the dirt, and works with ease and convenience, in heavy or light crops, on level fields or hillsides.

Dumps with one piece rod from both wheels at once—this makes even draft. Levers, hand and foot, give the driver control at all times.

STRONG, SIMPLE, DURABLE

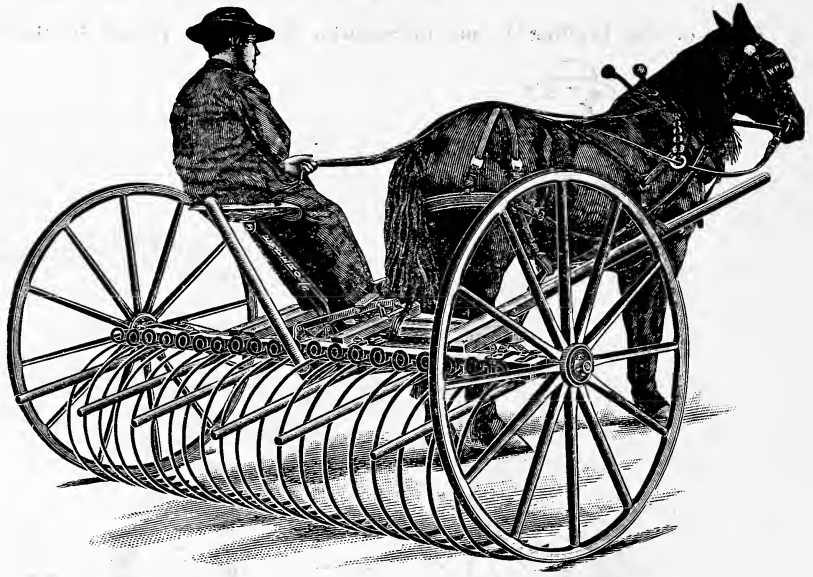


Price on Application



## The Wiard Emperor Sulky Rake

Many sulky rakes at the present time are only imitations of those made under old and expired patents, containing no improvements whatever, while in some cases changes have been made that are positively injurious to the working of the rake. Our Emperor Rake is the result of long and careful experiment, the dumping parts being entirely new and far different from anything else made. The rake is dumped with the greatest ease and with less wear, tear and jarring than any other positive dump rake.



We furnish these rakes in the following sizes: 8 feet wide, 28 teeth; 9 feet wide, 31 teeth. These are a few of the many valuable features:

**A doubly Trussed Frame** that prevents sagging.

**A Hand Lever That Does Not Change Position** when the foot dump is used. On many rakes this lever lies forward and back, sometimes striking the operator and causing serious injury.

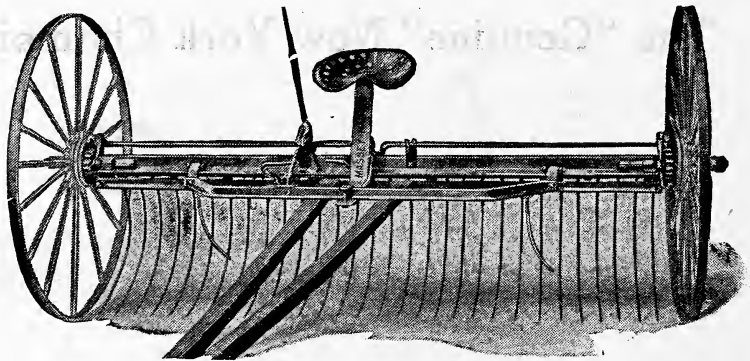
**A Revolving Steel Axle and Dumping Device** that cannot get out of order. Steel axles are best and most durable. Wood axles with castings for the wheels get rickety, sooner or later, and cause trouble.

Price on Application

## Massey-Harris Self-Dump Steel Hay Rake

BUILT STRONG AND LASTS LONG

Strength, efficiency and convenience of operation are pronounced features of this rake. It is built mostly of steel, is adapted to heavy and light hay, and can be dumped either by hand or by an automatic trip controlled by the foot. Frame and rake head are steel angles. Wheels are steel, of good height, have removable hubs, of which the ratchets are a part, and will interchange. Double wear is obtained from each ratchet.



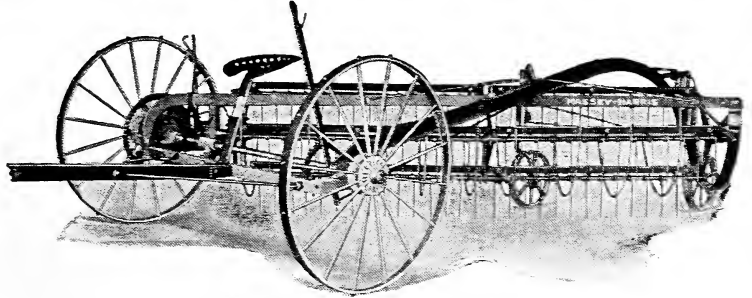
Dumping mechanism has no springs, is of utmost simplicity and can be adjusted to conform with the speed at which the horses walk. Teeth are coiled at upper end and are so shaped that they carry the hay along instead of dragging it. Combination thills and pole are a part of the regular equipment.

Price on Application

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

## Massey-Harris Combined Side Rake and Tedder

This implement offers you all of the advantages of the most modern side delivery rake and then goes on further. It gives you, in addition, an excellent hay tedder, into which it is quickly converted by simply moving a lever, which causes the motion of the raking cylinder to be reversed at increased speed. Combining two machines in one, it saves you the cost of one, the time of changing from one to the other when separate machines are used, and yet requires no more space for storing than a side rake of the ordinary type.



9½ Foot Cylinder for Hay

Price on Application

## Massey-Harris No. 5 Cylinder Hay Loader



### THE WINDROW LOADER SUPREME

It is light in weight and elevates the hay over roller bearings. Two horses handle it easily. Loading from the windrow is the purpose for which this loader is designed, and it has every feature that successful windrow loading requires. The weight is light, the capacity is large, it works rapidly and draws easily. It supplies in every respect the demand for an efficient windrow loader and will render you, in the saving of time and labor, a service of inestimable value.

Descriptive Circular and Price on Application

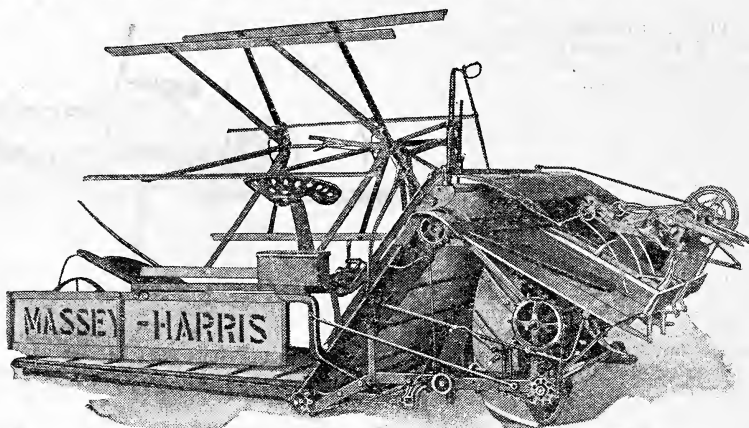
## Massey-Harris No. 5 Grain Binder

You can rely upon this binder, absolutely, to withstand the hardest kind of work incident to the harvesting of a grain crop. It is built for use with either horses or tractors and is made to give you satisfaction in every respect. Right from its foundation up through every part of its structure it is built for service, the principle of its design is correct, none of the materials are skimmed and the manufacturing operations are most carefully performed.

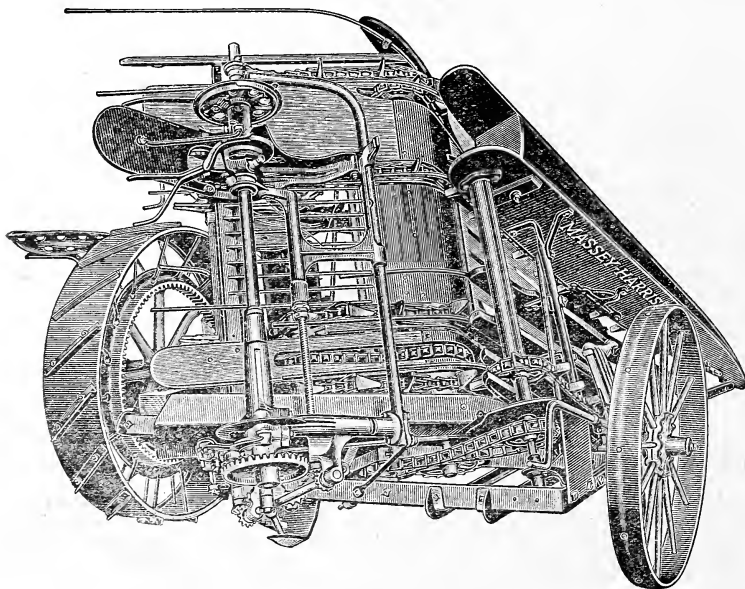
The main frame is trussed like a bridge. Seldom in agricultural instrument construction do you find a frame which has the strength and rigidity of this one. Lengthwise and crosswise, it is made up of a series of high carbon steel truss-like forms, which are so arranged and united that the strength of each one is contributed to and supplemented by that of the others. Indeed, so substantially is it tied, trussed and reinforced at every supporting point there isn't the least chance of sagging, twisting or any other kind of distortion, and a positive alignment of all bearings is assured.

Roller and self-aligning bearings lighten the draft. Special care has been exercised to provide bearings that would insure light draft and long life. For both the main and the grain wheels, for the cross and crank shafts, and for the rollers that drive the elevators, roller bearings in cages are used. Then, in addition, self-aligning boxes are provided wherever they are of advantage, as at the rear of the crank shaft, at the sprocket end of the inner platform roller, etc. Friction is minimized at every bearing point.

Price on Application



## Massey-Harris No. 3 Corn Binder

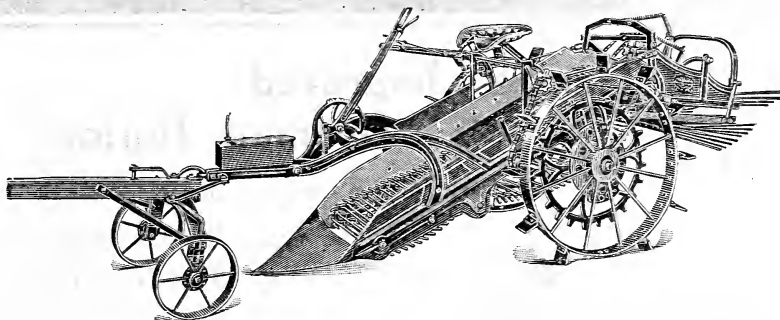


It's the only corn binder handling the stalks in an inclined position on which the knoter and needle can be raised or lowered to meet growths of different heights without stopping the machine or leaving the seat.

Whether your corn is the large firm varieties, which stand erect, the supple, spindly kind that often become lodged, or the short growths which are mixed with grassy bottoms, this machine will harvest it to your entire satisfaction. It is of an approved type and has several exclusive features of considerable merit, outstanding among which is a wider range of adjustment for accommodating all heights and kinds of corn than is found in other machines of its class.

Descriptive Circular and Price on Application

## The Hoover Potato Digger



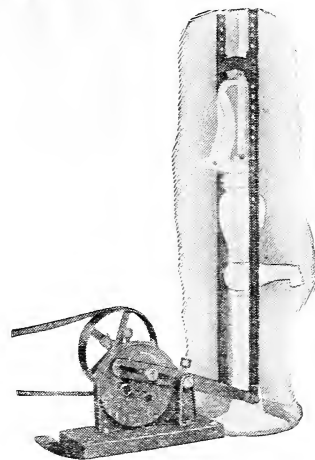
No. 330. "Hoover" Potato Digger with Agitating Rear Rack and Vine Separator

PRICE ON APPLICATION

## Bevan Pump Jack

The Bevan Junior Pump Jack is a machine designed and constructed to last a number of years. It has an exclusive patented method of distributing the power to the pump by means of a cast steel walking beam. This walking beam arrangement is so designed as to make possible a long leverage on the lift stroke and a short leverage on the return stroke, which reduces the water friction in pipe and pump cylinder 50%. By reason of this method it is possible to increase the speed of the pump one-half with a Bevan Jack. A few of the superior and patented features are as follows:

1. Slow lift and quick return stroke saves 50% of fuel and power and increases the capacity of the pump.
2. Will operate any type of hand force or windmill pump.
3. Large internal gear allows two teeth of the pinion in mesh at all times, increasing the strength and wearing surface.
4. Pinion made of steel with machine cut teeth, case hardened, shrunk and keyed on shaft.
5. Jack mounted on wooden base with anchor holes drilled ready for immediate installation.
6. Lift rods are of steel, channel section, and are provided with suitable end bearings at walking beam connections.
7. The travel of the lift rod is only one-fourth inch from a vertical position, eliminating all side thrust, jerking and undue wear on pump.
8. The motion of the walking beam lift arms is continuous up and down. There is no lost motion at top and bottom dead centers.
9. The smooth action of the walking beam and lift arms eliminates all wear on the pump, resulting in long life and minimum repair expense.
10. Walking beam is made of cast steel with roller channel accurately machined.
11. Walking beam pin and roller are made of steel and case hardened.
12. Babbitted bearings are used throughout.
13. All gears thoroughly enclosed as a complete protection against accidents and keeps out all grit and dust. Complies with law.
14. Grease cups are mounted on all bearings.
15. Jack can be used overhead just as efficiently as in the upright position.



Price on Application

**BEEMAN****JUNIOR  
TRACTOR****HERE IT IS!**

## The New Improved Beeman Junior

It's Play to Work with a Beeman Junior



Adjusted to Narrow Width

Beeman made the first garden tractor, and today the **best**. The present Beeman Junior is the last word in a power cultivator to take the place of a wheel hoe or push machine. You get 100% "go" with the Beeman Junior and 50% with a wheel hoe. You take "irk" out of work and place dollars in your pocket. There is no machine on the market that is in its class.



Adjusted to Wide Width

It is equipped with a one, two or three row cultivating attachment which is controlled by Beeman's famous patented oscillating device, which permits your cultivating up close to the plant, in straight or crooked rows. This eliminates a large amount of hand labor weeding. This wonderful machine will soon pay for itself on any farm where small vegetables are grown.

**FULL INFORMATION GIVEN UPON REQUEST**

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# Beeman One-Horse Tractor

**Replaces the Horse**

**We Have It On Display**

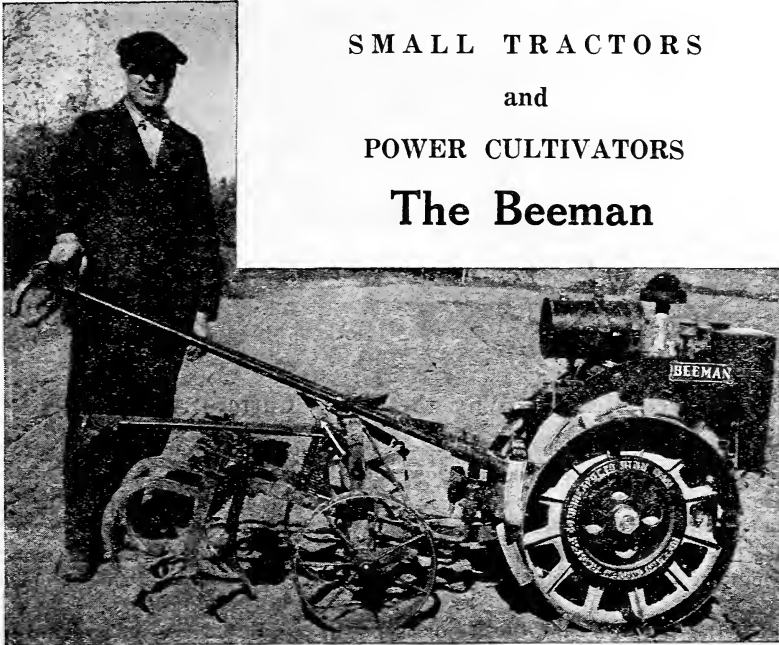
America's Pioneer

SMALL TRACTORS

and

POWER CULTIVATORS

**The Beeman**



**IT PLOWS, HARROWS, SEEDS, CULTIVATES**

**IT HAULS Mowing Machines, Lawn Mowers, Loads of All Kinds**

**IT RUNS Churns, Washing Machines, Water Jacks, Feed Grinders, Fanning Mills,  
Saw Rigs, Etc.**

**Any Work a 4 H. P. Engine Will Do**

The most efficient time and money saving machine ever built. Every one-horse job is a BEEMAN'S. It does the work of one horse, eats nothing when not at work, and ready to go when you are. Develops 2 H. P. at draw bar, 4 H. P. at belt, S. A. E. rating.

**Illustration equips tractor for general cultivation or care of any rowed crops,  
24 inches wide or wider**

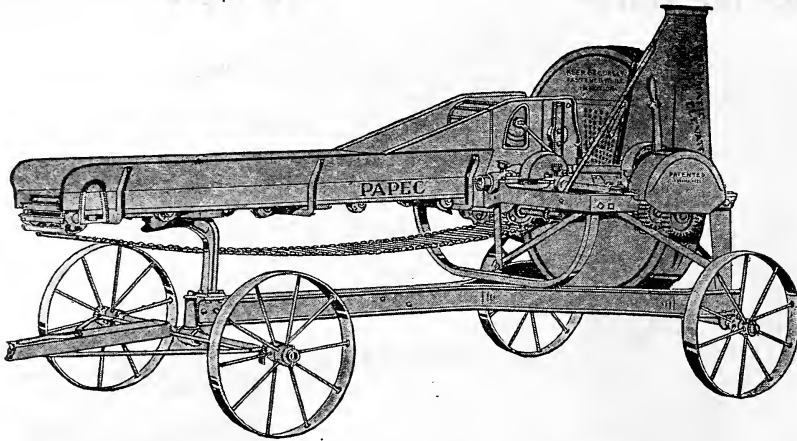
**Special equipment for narrow rows and other types of work**

**FULL INFORMATION CHEERFULLY GIVEN ON REQUEST**



## Papec Ensilage Cutters

They Throw as well as Blow



### Eleven Reasons Why the Papec Cutters Are Best

1. The Papec requires less power to elevate than any other blower cutter because "it throws as well as blows," and because it operates at a low speed of 600 R. P. M.
2. The Papec is not dependent upon the air blast alone to elevate ensilage. It throws as well as blows. Ensilage is thrown twenty feet or more, then a powerful air blast completes work of elevation.
3. The Papec has a powerful self-feed that handles far in excess of what the square inch throat opening would indicate. The capacity of the cutter is practically unlimited, yet clogging is almost unknown.
4. The pipe on the Papec is just the right size. The use of a large pipe requires a large fan, a large amount of air to be blown, high speed; hence results in a waste of power.
5. All Papec Cutters have a solid one-piece semi-steel frame. No wood to warp or twist—not affected by the weather—absolutely rigid for all time. The five heavy main bearings are a part of the frame, not bolted but cast in, hence the alignment of the cutting mechanism is perfect. The bearings are lined with an excellent grade of babbitt metal. The caps are provided with grease cups.
6. Because the semi-steel frame is solid there are no joints to work loose and for this reason the machine may be belted either way and the knives will run to the shear plate equally well.
7. The Papec is the handiest cutter to set up and operate. When once assembled, you have only to erect the blower pipe when starting to fill and remove the pipe when ready to move on.
8. For convenience in moving from one place to another the Papec mounting cannot be beaten. The table is permanently assembled—does not need to be folded up before moving—and is at the right height for the feeder to stand on the ground and feed with comfort.
9. The Papec knife can be adjusted to any position in one minute or less, and can be removed from the wheel without disturbing the adjustment by taking out only two bolts.
10. The Papec has six fans instead of three or four, and the ensilage is elevated in a steady stream instead of bunches. This means less power, less strain on machine and men, and less liability of pipe clogging.
11. The Papec drum is of sheet steel and will not break as a cast iron drum often does if a stone accidentally gets into the machine. Then, too, the smooth surface of the sheet steel insures easier elevation.

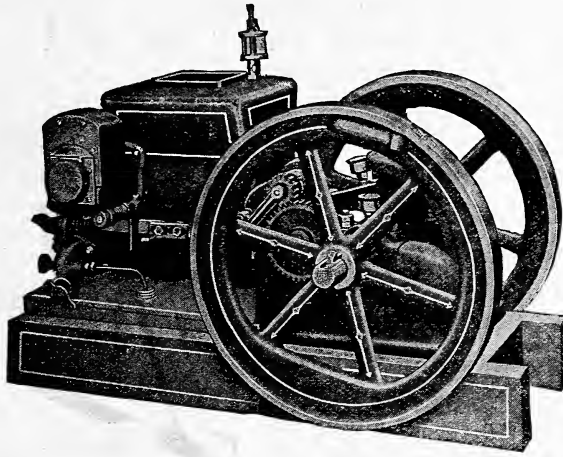
### SPECIFICATIONS

R-10 cutter with 2 knives, capacity 2 to 5 tons an hour; power 3 to 6 h. p. gas, cuts  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  and 1 inch lengths. Weight, 880 pounds on legs, 950 pounds with 2-wheel truck, 1060 pounds with 4-wheel truck.

N-13 cutter with 2 knives, capacity 5 to 10 tons an hour; power 6 to 10 h. p. gas, cuts  $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1 inch lengths. Weight unmounted, 1100 pounds, mounted, 1370 pounds.

Price on Application

## Gasoline or Kerosene Engines



### QUALITY ADVANTAGES OF MONARCH THROTTLING GOVERNOR ENGINES

1. Throttling governor for steady speed and close regulation.
2. Suction fuel feed—no pump.
3. Speed control while engine is running.
4. The new Remy high tension magneto makes a fat, hot spark.
5. Starts easily. Monarch method of vaporizing fuel insures easy starting.
6. Burns kerosene, gasoline, distillate.
7. Handles varying loads readily.
8. Economical in using fuel—one gallon per horse power each 10 hours.
9. Surplus power—20 per cent. overload.
10. Special water spray valve supplies water to combustion chamber, assisting combustion and giving smoother operation.
11. Fuel is taken into cylinder cold, thus giving greatest power for fuel consumed.
12. Monarch oversize valves, reduce carbon.
13. Large, heavy flywheels, properly counter-balanced, insure smooth, steady running without vibration.
14. Pulleys attached to crank shaft—standard pulleys may be used.

### MONARCH "HIT AND MISS" ENGINES

Monarch "Hit and Miss" engines burn gasoline only. The "Hit and Miss" governor is recognized by engine authorities as the best for small engines—particularly the  $1\frac{3}{4}$  horse power. This governor automatically regulates the fuel supply so that only enough gasoline can be drawn into cylinder to keep the engine up to normal speed.

Power and long life are largely a matter of bore and stroke. Read carefully the specifications given below. You will find Monarch engines well in the lead with surplus power.

### SPECIFICATIONS OF MONARCH ENGINES

Horse Power	Type of Governor	Fuel Consumed	Speed	Floor Space	Cylinder	Diameter of Fly-wheels	Size of Pulley	Weight
$1\frac{3}{4}$	Hit and Miss	Gasoline	500	20" x 40"	$3\frac{1}{2}$ " x 5"	16"	4" x 4"	225 lbs.
3	Throttle	Kerosene and gasoline	450	27 x 38	$4\frac{1}{2}$ x 6	21	8 x 6	475 "
5	Throttle	Kerosene and gasoline	430	30 x 45	$4\frac{3}{4}$ x 8	26	12 x 6	700 "
7	Throttle	Kerosene and gasoline	370	38 x 58	$5\frac{1}{2}$ x 10	36	14 x 8	1215 "
12	Throttle	Kerosene and gasoline	330	46 x 71	$6\frac{3}{4}$ x 12	42	22 x 8	2100 "

### Price on Application

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## No. 1605 Wood Saw Frame

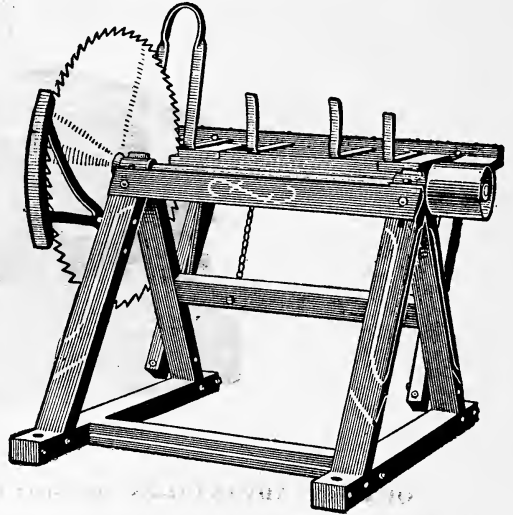
This frame is especially adapted for heavy work, will swing blade up to and including 30 inches. Ripping and shingle table can be attached to this frame.

**Mandrel**—Cold rolled steel 1 7-16 inches in diameter, 49 inches long. Fitted for saw with 1 3-8 inch arbor.

**Flywheel**—70 pounds, 17 inches in diameter.

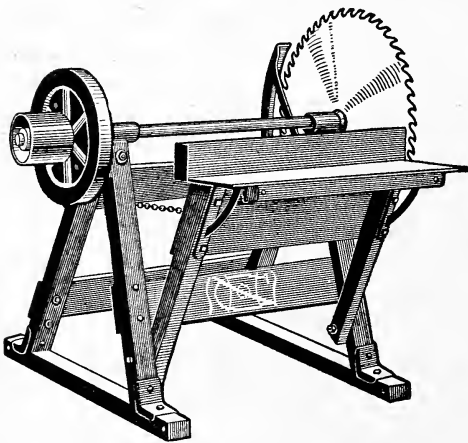
**Pulley**—6-inch face, 6 inches in diameter.

**Boxes**—Split pattern, the lower half runs the length of the frame, being a part of it, making it impossible to get out of alignment with the mandrel. Having liner adjustment features. Lined with high speed bearing metal.



PRICE ON APPLICATION

## No. 4 Wood Saw Frame With Tilting Table



The frame is built especially for doing custom or contract work. Carries cord wood saws up to and including 30 inches.

**Mandrel**—Cold rolled steel 1 7-16 inches in diameter, 49 inches long. Fitted for saw with 1 3-8 inch arbor.

**Flywheel**—56 pounds, 17 inches in diameter.

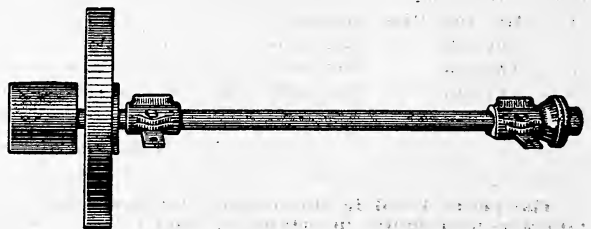
**Pulley**—6-inch face, 6 inches in diameter.

**Boxes**—Solid pattern, lined with good babbitt.

**Shipping Weight**—256 pounds.

## Mandrel Sets

No. 2 Mandrel with 70-pounds flywheel, 6 x 6 inch pulley. Size of mandrel, 1 7-16 inches in diameter, 49 inches long, to fit 1 3-8 inch saw.



PRICE ON APPLICATION

## No. 1 Wood Saw Frame

This is undoubtedly the greatest all round small rig ever offered. When an 18-inch blade is used it may be run with 1 H. P., but we recommend 2 H. P. Will carry a blade up to and including 22 inches.

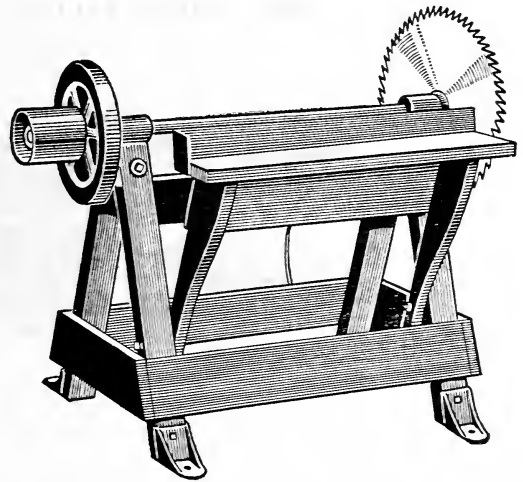
**Frame**—The frame is well built of good seasoned wood, securely put together.

**Mandrel**—Cold rolled steel 1 5-16 inches in diameter, 41 inches long. Fitted for saw having 1 $\frac{1}{4}$ -inch arbor.

**Flywheel**—35 pounds, 13 $\frac{1}{2}$  inches in diameter.

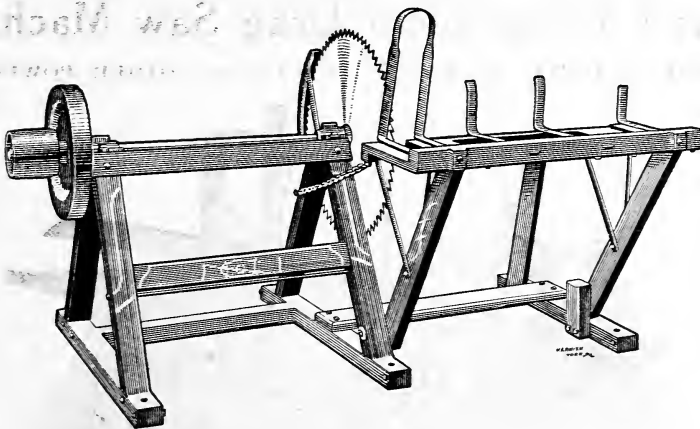
**Pulley**—5-inch face, 5 inches in diameter.

**Boxes**—Solid pattern, lined with high speed bearing metal.



Price on Application

## No. 1607 Wood Saw Frame With Pole Extension



This frame meets the requirements where long pole wood is to be sawed.

**Mandrel**—Cold rolled steel 1 7-16 inches in diameter, 49 inches long. Fitted for saw with 1 $\frac{3}{8}$ -inch arbor.

**Flywheel**—70 pounds, 17 inches in diameter.

**Pulley**—6-inch face, 6 inches in diameter.

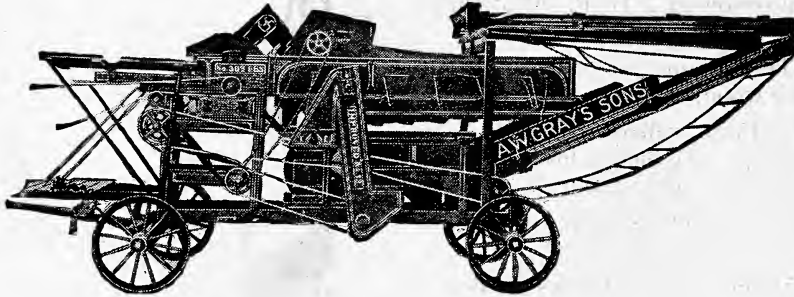
**Boxes**—Split pattern, the lower half runs the length of the frame, being a part of it, making it impossible to get out of alignment with the mandrel. Having liner adjustment features. Lined with high speed bearing metal.

PRICE ON APPLICATION

## Gray's New Thresher Nos. 305-306

WITH TAILINGS ELEVATOR, BAGGER, STACKER, ETC.

Nos. 231-261 Also in Stock

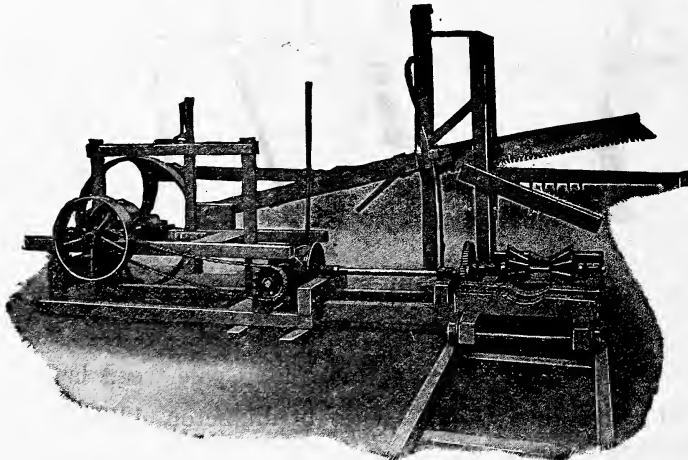


This thresher has been remodeled and reconstructed, and while built along the lines of regular threshers, a number of radical changes have been made, one of the principal ones being that it is arranged so that it commences to separate the grain from the straw as soon as it leaves the cylinder, thus meeting the special benefit claimed for the undershot threshers. It is built especially to meet the demand for use with gasoline engines, is made with 18x30 cylinder, but two different sizes of separators have been added to admit using different size engines and are numbered 305 and 306.

Price on Application

## Gray's Independent Drag Saw Machine

FRICTION DRIVE, TO RUN BY ENGINE OR OTHER POWER

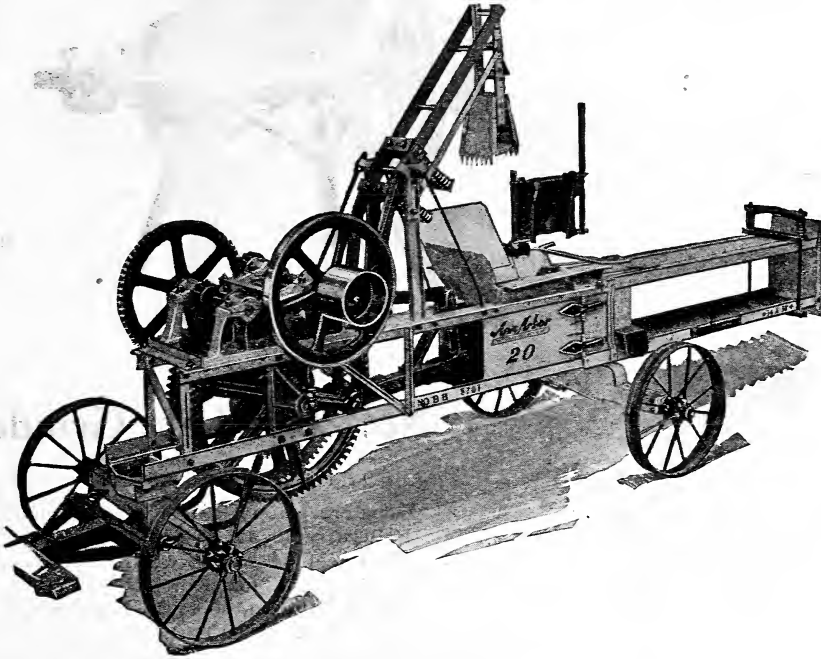


This is the latest and best drag sawing machine on the market. One of the most important points in using the drag saw is to be able to start it slowly, thus removing any danger of breaking or bending the saw, and this is accomplished perfectly by using the fraction transmission. Another feature is to be able to stop instantly and this is arranged for in this machine as the moving of the brake lever releases the friction pulley, at the same time applies the brake on the balance wheel, thus stopping the machine instantly. By changing the size of the driving pulley on the counter shaft, these machines may be adapted to almost any style of power.

Price on Application

## Ann Arbor Balers

"THE BALER FOR BUSINESS"



THE ANN ARBOR "20"

The Ann Arbor "20" is the best value, reliable belt-power baler on the market. It is particularly well suited for baling alfalfa and for such baling requirements as are met with in the middle West, South and Southwest.

The Ann Arbor "20" is a single geared machine with longer stroke than similar presses. In general construction, such as the large feed opening, the "grasshopper" feeder arm, the automatic block dropper, perfect alignment of the strong gearing, all gears on true centers, the hot riveted bale chamber, top and bottom, the Ann Arbor "20" is the same as the Ann Arbor "35." The essential difference is in the total weight and in the capacity of the machine. It also has an all-steel frame construction, built **low down**—feed hopper only 39 inches from the ground, and is light in weight so that you can easily haul it to the field and bale direct from the windrow.

For producing well-formed, square cornered bales at a remarkably low cost, the Ann Arbor "20" is just the machine you want. It can be had with an extended platform for making a "combination" outfit, and then the whole outfit complete can be easily hauled to any part of the field.

If any machine in the world is entitled to the name Alfalfa King, Alfalfa Queen or any other member of the Royal Alfalfa Family, it is the Ann Arbor "20." In this machine we recognize the **absolute necessity** of preserving the delicate leaves and branches of this valuable food plant. (Get Government report on alfalfa.)

Take your pocket rule and measure the length of the Ann Arbor feed opening; measure the dimensions of the feeder head, and you will appreciate what we have done for the conservation of the country's greatest forage crop in giving to alfalfa producers the Ann Arbor "20."

The long bale chamber gives ample time for tying at any speed of feeding. Capacity, 2 to 3½ tons per hour.

Sizes: 14x18 inches; 16x18 inches; special, 17x22 inches.

Price on Application

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## No. 9 Letz Grinder

### SPECIFICATIONS

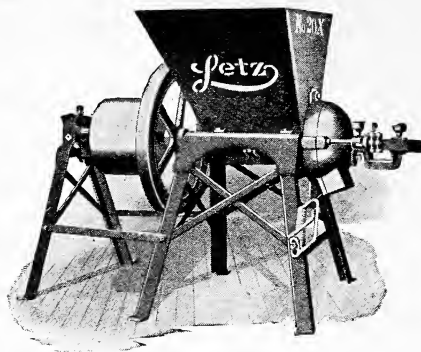
Grinding plates, 8 inches in diameter.  
Drive shaft, 1 7-16 inch.  
Pulleys, 8, 10, 12, 14 and 16 inches.  
Fly wheel, 24 inches; weight, 55 pounds.  
Total weight, 273 pounds.  
Power required, 3 to 7 horse power.  
Capacity, 6 to 30 bushels per hour.

The No. 9 Letz is a combination cob crusher and small grain grinder. It is an ideal mill for medium power.



11 Sizes  
22 Styles

1-2 to 40  
Horse Power



## No. 20-X Letz Grinder

### SPECIFICATIONS

Grinding plates, 10 inches in diameter.  
Pulleys, 8, 10, 12, 14 and 16 inches.  
Fly wheel, 24 inches; weight, 85 pounds.  
Total weight, 402 pounds.  
Power required, 10 to 15 horse power.  
Capacity, 25 to 60 bushels per hour.

It is an extra heavily built grinder for large power, grinds finer and faster, and will last a lifetime.

## Banner Root Cutters

NO. 20



For Hand Use

Capacity, 30 to 50 bushels per hour.

Weight, 120 lbs.

NO. 7



Exclusively for Poultry

It cuts fast and is easy running. Leaves the feed in fine, brittle, ribbon-like strips that make choking impossible. Fowls, large or small, can safely eat the feed. The knives are adjustable and made of the very best of steel. An iron grate in bottom of hopper lets dirt and gravel escape before reaching the knives. In this cutter we offer the poultrymen a low-priced, high-grade, nicely finished and mechanically constructed machine and feel that anyone who desires to feed roots and vegetables to their flocks can well afford to own one. Two to five minutes will cut enough feed for a large flock of birds.

Write for Quotations

## Hocking Valley Cider Mills

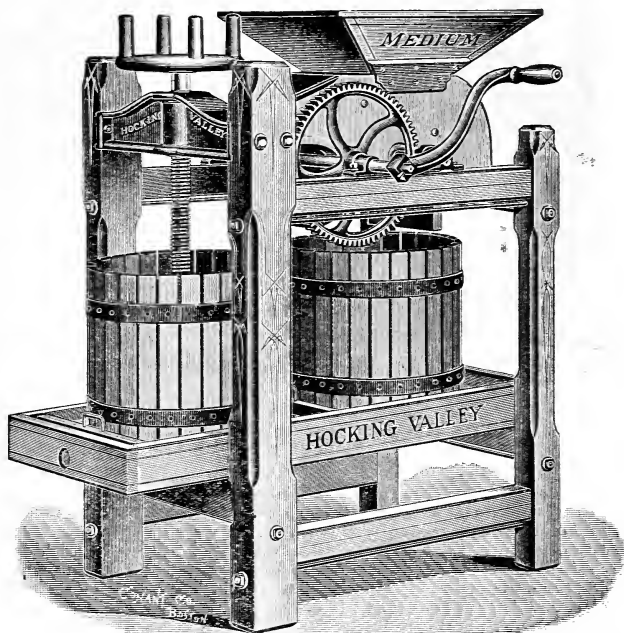
The Device for Grinding the Fruit Is the Same as That Used on the Large Hydraulic Presses.  
There Are No Cast Iron Rollers to Rust and to Give Color and Taste to the Cider.

In these cider mills we adapt the principle of the large hydraulic presses to a hand mill. The grinding device consists of a hardwood cylinder, revolving rapidly, with serrated steel knives running lengthwise, which break down the juice cells and make a pomace that yields under the press every particle of juice in the fruit. They are made in the three following sizes:

**Junior**, with tubs 12 inches high, 10½ inches inside. Capacity, 25 to 35 bushels per day.

**Medium**, with tubs 13½ inches high, 12½ inches inside. Capacity, 30 to 40 bushels per day.

**Senior**, with tubs 15 inches high, 15½ inches inside. Capacity, 50 to 60 bushels per day.



PRICE ON APPLICATION

## Hocking Valley Fruit Press

The fruit press here represented is constructed of strictly high grade hard wood lumber, is thoroughly well made and handsomely finished. They are made in the following sizes:

### No. 1

This has a wood cross head, a 1-inch screw, and the crib or tub is 10½ inches high and 8½ inches in diameter. Its capacity of course is limited, but sufficient to meet the wants of many, as we have a generous trade on it.

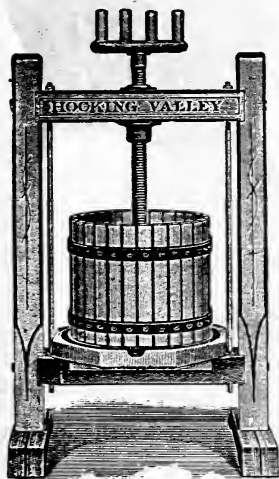
### No. 2

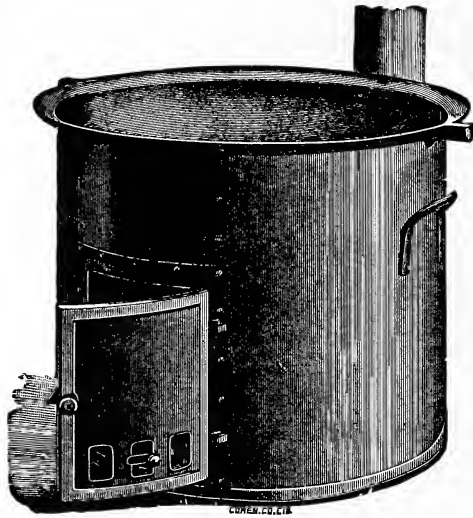
This size has a wood cross head, a 1¼-inch screw, and the crib or tub is 11¼ inches high and 10 inches in diameter. This is the size preferred for general family use and most in demand.

### No. 3

This size has a wood cross head, a 1½-inch screw, and the tub is 12¾ inches high and 12¾ inches in diameter. It is used where greater capacity is wanted.

PRICE ON APPLICATION





## Farmer's Boiler and Feed Cooker

(WOOD BURNING)

Heavy cold rolled steel furnace; extra large feed door; malleable iron handles, firmly riveted on; strong, durable, economical and cheapest feed cooker on the market.

The kettles are of smooth, heavy cast iron, and will last a lifetime. The furnace jacket is of heavy cold rolled steel and very durable. Door, frame and flue collar cast iron.

Is designed to set on the ground or on brick foundation, and is especially adapted for cooking feed, rendering lard, making soap, scalding hogs and poultry, and all work of this nature. Cast iron flues are constructed inside, retaining the heat and greatly economizing fuel.

Capacity	Diameter of Furnace	Capacity	Diameter of Furnace
15 gals.	20 1/4 inches	55 gals.	32 inches
22 gals.	23 inches	65 gals.	34 inches
30 gals.	26 inches	75 gals.	36 inches
35 gals.	28 1/2 inches	90 gals.	38 1/2 inches
40 gals.	29 1/2 inches	110 gals.	43 inches
50 gals.	31 1/2 inches		

## "Farmer's" Favorite

The top section, or boiler, is made of heavy galvanized steel that will not rust, and is also provided with four heavy tinned malleable iron drop handles. This sets down inside the lower section one inch, thus making it impossible for the boiler to slip to one side and tip over, as when on top of furnace.

The lower section, or furnace, is made with cast iron ends, and the center, or body, of heavy steel plate.

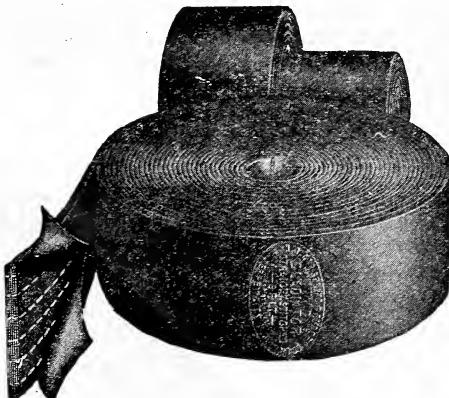
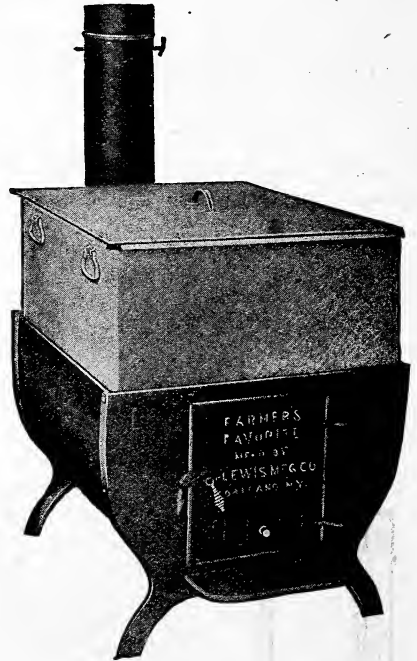
With this construction the entire surface of the boiler is exposed to the heat, thus making it a very quick heater.

The door is extra large, which will allow large chunks and knots to be used without the labor of splitting.

	Capacity	Size Boiler	Length Fire Box
No. 1	25 gallons	22x22x12	24 inches
No. 2	30 gallons	22x24x13 1/2	24 inches
No. 3	40 gallons	22x30x14	30 inches
No. 4	50 gallons	22x36x15	36 inches
No. 5	75 gallons	22x48x17	48 inches

Our prices are for the cooker complete, consisting of stove, or firebox, galvanized steel boiler with four handles and cover, one length of 6-inch stove pipe and damper, and one 6-inch elbow.

Price on Application



## Rubber Belting

Made from the highest grade material. Belting that will give you the maximum service under all operating conditions.

Price on Application

NO. 14

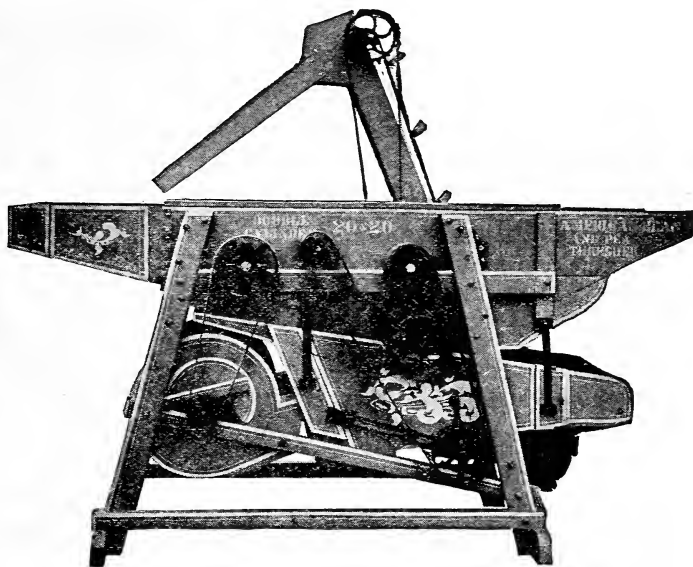
AMERICAN

Double Cylinder

**Bean and Pea Thresher**

Strong, Rugged, Efficient  
Every Buyer a Satisfied Customer

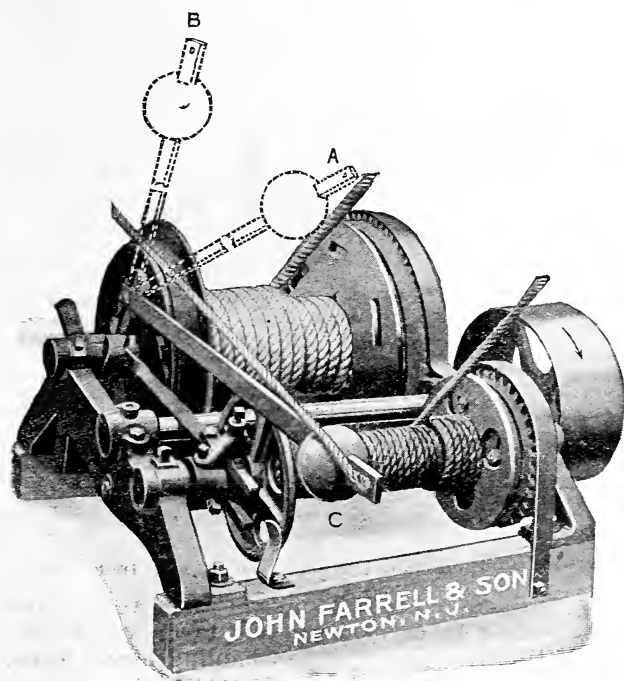
This machine will thresh all varieties of beans (or peas) directly from the rankest growing vines without splitting the seed. It takes all the seed from the vines and pods in a clean, marketable condition, and shreds the vines, making them valuable for fodder.



PRICE ON APPLICATION

**Latest Model Style B Hoist**

DOUBLE DRUM, SINGLE LEVER, LOCK BRAKE



This new model hoist is designed so that both large and small drums are controlled by one lever. The hoist can therefore be operated from the load, using only a single line. The lever is automatically held in the position A, which is neutral, and both drums are then out of friction. Raising the lever to the position B forces the large drum into friction to lift the load. Letting up quickly on the lever or operating rope causes the lever to go past the neutral position and forces the small drum into friction. To return to the neutral position, raise the lever and let it slowly back against the automatic stop.

This style is designed for use in unloading hay in long barns, where pulling back the carrier is hard work.

PRICE ON APPLICATION

## Concrete Mixer

### YOU NEED A MIXER ON YOUR Farm

Every farm owner has ideas of improving his farm and increasing its value, not only by increased fertility of the soil, but also by the addition of permanent farm structures. Concrete forms the cheapest and best foundation for all improvements.

#### Quantities Required

A cubic yard of concrete of 1-2-4 mixture will require:

1 1-2 barrels (6 sacks) of Portland cement.

2-5 cubic yard of sand.

4-5 cubic yard of gravel or crushed rock.

#### General Specifications

Drum—Largest diameter, 22 in.; depth, 21 in.; opening, 17 in.

Shoveling Height—3 ft.

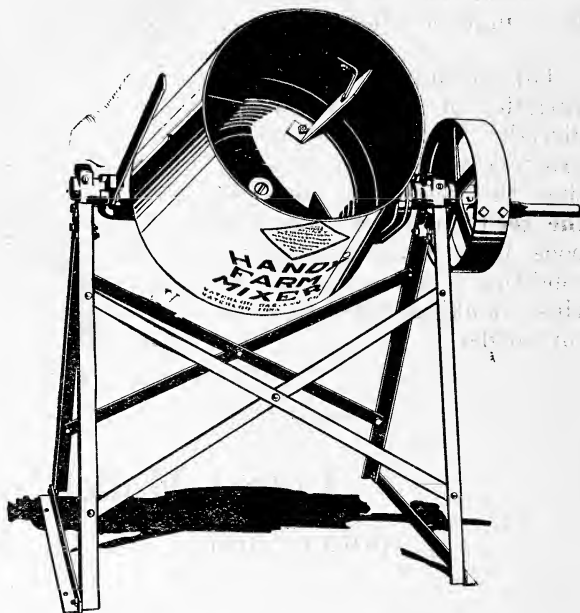
Pulley Size—16 x 3 in.

Pulley Speed—150 R. P. M. maximum.

Drum Speed—30 R. P. M. maximum.

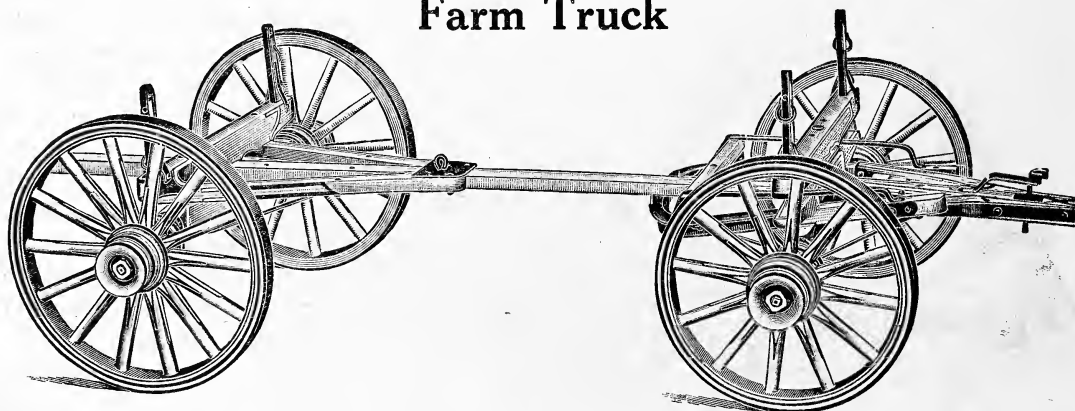
Shipped knocked down; weight, 180 pounds.

Capacity—Wheelbarrow load per batch. One batch per minute.



PRICE ON APPLICATION

## Farm Truck



Crescent Truck, with  $3\frac{1}{4} \times 9$  Inch Skein, 36 and 40 Inch Wood Wheels, and  $3 \times \frac{3}{8}$  Inch Tires

We emphatically recommend this truck as adapted for all kinds of farm work, being exceptionally well made, and so constructed as to carry any style farm wagon box. The frames are solidly put together, and are of especial value in hauling **heavy loads**, being built with that end in view. Are equipped with heavy wood wheels.

PRICE ON APPLICATION



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